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Original Translations.

ARTICLE I. — *Investigations into the Pacinian Corpuscles.*

By DR. M. GRANDRY, Liège.

THE history of the corpuscles of Vater and of Pacini seemed to be complete, when, recently, Leydig indicated the existence of a new structure in the corpuscles, which is met with in the beak of the woodcock.

According to Leydig the corpuscles of Pacini are composed of a certain number of conjunctive capsules enclosed the one within the other, the innermost being more closely adherent to each other than the more external. At the centre is found a cylindrical cord of a homogeneous and granular structure, whose axis is occupied by a very fine canal. This cord appeared to be the thickened termination of a nerve-fibre which may have penetrated into the Pacinian corpuscle. After having lost its double contours, that is to say, its medullary sheath, this fibre might be thickened into the central cylindrical cord of the corpuscle. The Pacinian corpuscles of birds should present the same type, and should differ from those of mammiferæ only in secondary points.

According to Kölliker and other authors, the central cord

which Leydig considers of a nervous character, should be of connective tissue, and the central canal of Leydig should be the termination of the fibre.

Recently, Leydig has described another structure in the Pacinian corpuscles and in those of the beak of the woodcock. The central cord should not be homogeneous and granular, but should contain in its interior particular bodies, and should present a particular striation.

The particular bodies are quadrangular bodies all of the same volume, not contiguous, but separated regularly from each other by granular matter and presenting a characteristic arrangement.

They are found united under the form of two linear series, parallel to the axis of the central cord; they are more separated from the centre of the cord than from the connective envelope, although, however, they are not in contact with this; they are separated from it by an interval clearly visible and formed by granular matter analogous to that which constitutes the rest of the central cord.

Besides these particular bodies Leydig describes two orders of striæ upon the central cord. The first order is formed of transverse striæ which connect the particular bodies from one side to the other. The other order of striæ is oblique, so that the striæ starting from the centre are directed obliquely outward toward the superior part of the corpuscle. The canal may be visible in a portion of the central cylinder only near the entrance of the fibre, and not throughout its extent.

As to the histological signification of the particular bodies and of the striæ, Leydig seeks to compare them to the little rods which Mr. Shultze has described in the eyes of the arthropods. The media employed by Leydig for study of the Pacinian corpuscles are acetic acid and glycerine.

My investigations have been made upon the Pacinian corpuscles of the bill of the duck and of the goose, and upon those of the mesentery of the cat, with the same media as Leydig and also with hyperosmic acid and chloride of gold.

PACINIAN CORPUSCLES OF THE DUCK AND THE GOOSE.

The Pacinian corpuscles of the skin of the bill of the duck and the goose, although formed after the ordinary type of cor-

puscles which are found in other birds, differ from them, however, by the structure of the central bulb, and approximate to those described by Leydig in the woodcock.

They are formed of a connective envelope and a central bulb. The connective envelope is composed of two portions, clearly distinct; one external, formed of concentric capsules, the other, internal, formed by a connective tissue of fine fibres interlaced in every direction, but whose most internal parts, however, seem to form layers concentric to the central bulb, at least after the addition of acetic acid. The internal portion of the envelope is sufficiently colored to prevent the examination of the corpuscles unless acetic acid be employed.

In relation to the structure of the central bulb; two species of Pacinian corpuscles should be distinguished: the first resembling perfectly the corpuscles observed in birds, the second presenting much analogy to those which Leydig has so lately described.

As in the woodcock, so also in the duck, there exists in the central bulb, rounded and quadrangular bodies placed in two series by the side of the central fibre (central canal of Leydig) at regular intervals, and separated by finely granular matter, having no relation with the envelope, from which they are remote and separated from it by the same substance which isolates them from each other.

These bodies exhibit in their interior a more opaque point, which may be considered as nucleus or nucleolus, according as they (the bodies) are regarded as cell or nucleus.

The central fibre of the Pacinian corpuscles of the duck or the goose appears entirely similar to that of the corpuscles of other birds. However, the terminal extremity of the fibre in these animals is found to be more voluminous and more granular than that which is found, for example, in the Pacinian corpuscles of the pigeon in the space between the tibia and the fibula.

I have never discovered corpuscles in which the fibre bifurcated near its terminal extremity as in the cat; I have, however, observed the division of the fibre a little after its entrance into the central bulb, and then there was seen in the same corpuscle two central bulbs united by one extremity.

All the characters which I have just indicated are very easily recognized by the action of weak acetic acid alone, but the whole

becomes much more clear if the preparation be made by using weak chromic acid.

The corpuscles of the woodcock, in addition to the particular bodies, present striæ; it has been impossible for me to detect them in those of the duck or goose.

The chloride of gold has likewise a remarkable action upon these corpuscles. If the skin of a duck's or goose's bill be placed in a solution of chloride of gold of $\frac{1}{100}$ for twenty-four hours, as soon as the action has been completed the entire bulb is seen to be strongly colored, and to be continuous with the fibre in such a manner that this latter seems to terminate by a swelling which is no other than the entire bulb. This reaction seems to plead in favor of the opinion of Leydig, who considers the entire bulb as the termination of the nerve; but a less complete degree of reaction, and especially hyperosmic acid, shows in a perfectly clear manner that the fibre is continuous entirely through the central bulb, and that, at least, the peripheric part of this has not the same composition as the centre, and that that which Leydig considers as a canal is the immediate continuation of the axis cylinder of the fibre which enters into the corpuscle. If the chloride of gold has acted incompletely, the centre will be seen to be first attacked and then the exterior; very frequently even the whole is attacked and the fibre is most marked at the centre.

As to the corpuscles of Leydig, they are uniformly colored like the rest of the central bulb, and in the case of complete reaction, it is impossible to recover any traces of them.

The chloride of gold, which does not attack the envelope, and on the contrary colors the entire central bulb, tends to show that the tissue which surrounds the fibre, approximates, by its characters, more closely to nerve-substance than to connective tissue.

Hyperosmic acid shows best the central fibre and the terminal granular swelling. However, it colors likewise, but less the rest of the central bulb. By means of this re-agent, the central fibre may sometimes be seen terminating by a little swelling in the midst of the ordinary terminal swelling.

By the side of the Pacinian corpuscles another form of nerve termination is found in the bill of the duck and of the goose, about the structure of which I am not yet altogether decided, especially as regards the termination of the nerve. I believe it

useless to describe, and refer to the plates which will give much better than a description, an exact idea of their form, etc.

PACINIAN CORPUSCLES OF THE CAT.

Previous investigation has established in a manner almost complete the structure of the Pacinian corpuscles of the cat; I shall only speak of the action of certain re-agents, which have enabled me to recognize some details not described thus far, concerning the passage of the nerve-fibre into the central bulb, and concerning its mode of termination. The re-agents employed have been iodserum and hyperosmic acid.

If the mesentery of a cat be placed for several hours in a solution of hyperosmic acid of $\frac{1}{400}$, the following particulars may be observed:

The nervous fibre pertaining to the corpuscle is colored intensely black up to its entrance into the central bulb, and at this point the color diminishes abruptly, and shows that the medullary sheath is not continuous with the fibre into the interior of the bulb.

The fibre after its entrance is colored moderately brown, and is seen to be situated longitudinally.

The enlarged and granular portion which is considered as the termination of the nerve, exhibits a peculiar structure. The nerve-fibre in reaching this point, is divided into a great number of fibrillæ which terminate in a roundish granular mass, and it is impossible to follow them further than the half of the depth of this mass; the extremities of the fibrillæ are readily seen terminating abruptly in the midst of the granulations, and nearly all upon the same level, so that the terminal organ of the fibre is seen to be formed in its inferior half by fibrillæ and granular matter, and in its superior half by a mass formed of granular substance, limiting in the clearest manner the substance which constitutes the remainder of the central bulb.

I have endeavored to determine if the fibres expanded in diverging to embrace a round, granular mass, or if they penetrated into its interior, but it is impossible for me to decide upon this point. Perhaps the same mode of termination of a fibre at its peripheral extremity may exist here, as that lately described by M. Schultze as the termination of nerve-fibres at their central

extremity in the nerve-cells. By means of iodserum, one may recognize in pieces perfectly fresh, the same structure of the terminal swelling as that denoted by the action of hyperosmic acid.

The investigations whose results have been detailed in this treatise, were made in the laboratory of M. Schultze, and I here return my thanks to this distinguished scholar for the kindness which he has shown me in directing me in my investigations.

W. H.

ARTICLE II.—*Investigations into the Terminations of the Cutaneous Nerves in Man.* By DR. GRANDRY, Liège. (Robins' Journal de la Physiologie et de l'Anatomie.)

IN this article the mode of termination of the nerves in the corpuscles of Meissner will alone be discussed. As to the modes of termination indicated by Langerhaus, and to that in the tactile papillæ indicated by Odenius, they shall be discussed in a subsequent article.

The history of the corpuscles of Meissner has been discussed for a number of years, and the different observers by no means agree concerning the intimate structure of this terminal nervous organ, and especially about the mode of termination of the fibre itself. The bibliographical question having been very well treated in the paper of M. Rouget,* it is not necessary to return to it here. I shall only concern myself with the terminal extremity of the nerve, and with its relations to the envelope of the corpuscle.

Before describing the result of my observations, I shall give, in detail, the process followed. Fragments of skin of the fingers taken from an arm amputated in consequence of a white swelling of the elbow, were placed in different re-agents—acetic acid, bichromate of potass., chloride of gold, hyperosmic acid—and it was by the use of the re-agents that I obtained the results which I shall describe. With the solution of the bichromate of

* *Archives de Physiologie Normale et Pathologique*. Publiées par M. M. Brown-Sequard, etc. No. 5, 1868.

potass., or the solution of Müller, I succeeded best in seeing the termination. For the course of the nerve itself, hyperosmic acid should be used in preference.

Several points should be considered in the examination of the corpuscles of Meissner: 1st, the envelope; 2nd, the central bulb; 3rd, the course of the fibre; 4th, its mode of termination.

The envelope is formed of dense connective tissue, as Kölliker admits, and I believe with this observer, that the transverse nuclei which are seen at the surface, especially under the action of acetic acid, belong to the connective tissue. In any case, I have not been able to discover the spiral arrangement of the fibre reduced to the condition of axis-cylinder. I believe the central bulb to be altogether analagous to that of the Pacinian corpuscles, and therefore I refer to what I have said of the reaction of chloride of gold upon these corpuscles. However, there is one fact to which I desire to direct attention successively. It is the existence, in the interior, of this central bulb of morphological elements, a fact denied by some observers.

The course of the medullary fibre is exactly that described by the majority of observers; that is to say, that it forms a spiral with large coils around the corpuscle, and thus reaches the upper portion of the corpuscle, still remaining within the envelope, without penetrating the central bulb. Does the medullary fibre always advance toward the exterior of the central bulb? I do not believe it, for I have distinctly seen, under osmic acid, the fibre in the interior of the envelope, and the solution of Müller has equally well demonstrated it to me penetrating into the central bulb still provided with medullary matter. Many opinions are held concerning its mode of termination. Rouget says that the fibre terminates in the central mass, being continuous with it, so that the central bulb may be considered as the fibre enlarged, and according to this author the morphological elements should be analagous to those found in the terminal plates of the muscles. I, however, have ascertained that the nerve does not terminate by becoming continuous with the central mass, but, indeed, with the morphological elements which are found in its interior; and this suggests thoroughly the terminal enlargements of the Pacinian corpuscles. Moreover, I have made the following observations upon transverse sections of the corpuscles of

Meissner, from the pulp of the fingers, treated by the solution of Müller.

I observed in their interior bodies more or less spherical, granular, varying (in diameter) from $0^{mm}008$ to $0^{mm}01$, which seemed frequently isolated and having no relation with a fibre or with the envelope, and situated most frequently close to the vertical axis of the corpuscle. Attentive examination, and good preparations, permit the detection, besides the spherical bodies, of excessively pale fibres lying in different planes not anastomosing, separating from the envelope, not losing themselves in the granular matter, but becoming continuous with the morphological granular elements, so that the latter appear pediculated. A fact well worth noticing is that the fibres separating from the envelope do not go directly to the granular bodies, but describe sinuosities more or less large before reaching them. I have seen a nerve fibre with double contour penetrating into the interior become reduced to the state of axis-cylinder and become continuous with the granular bodies.

At this point the question may be asked: Does the fibre terminate in a brush of more minute fibres reduced to the state of axis-cylinder; or, in describing spirals around the corpuscle, does it send out lateral branches which, passing on, terminate in the central bulb? I could not actually determine this. I believe, however, that there are lateral fibres sent out by the principal fibre; but I am not indisposed to believe that at its termination the medullary fibre subdivides into several branches. I have seen fibres separating from the lateral parts and terminating in the central mass by granular enlargements. What I have said concerning one fibre is applicable to corpuscles which receive several of them. Each one of them sends off branches which terminate by a swollen extremity in the central bulb.

If, now, comparison be made between the corpuscles of Pacini and the corpuscles of Meissner, it will appear that, in the corpuscles of Meissner, the termination of the nerve does not differ from that of the corpuscle of Pacini; that in both cases the fibre is terminated by a swollen extremity; the only difference being that in the corpuscles of the skin the fibre furnishes a greater number of terminal extremities, although three of them might have been found in the corpuscles of Pacini. I have not been

able to determine whether the axis-cylinder behaves in the corpuscles of Meissner as in those of Pacini; that is to say, whether they divide into fibrillæ upon reaching their terminal enlargement.

My investigations have been conducted in the histological laboratory of the Faculty of Medicine of Paris, under the direction of M. Robin (Professor), to whom I here testify my gratitude for his wise counsels given to me upon all occasions. W. H.

Hospital Reports.

ARTICLE I.—*Cook County Hospital.* Reported by CURTIS T. FENN, M.D.

THE number of fractures in the Surgical Department of Cook County Hospital is sufficient to show that these injuries are deserving of special attention. Add the cases likely to be consigned to other hospitals, or conveyed to the dispensaries, as well as those which fall to private hands, and the whole number whose broken bones are splinted in Chicago daily would give several surgeons exclusive employment. This great field is comparatively neglected. While the most diverse views are taught, a deplorable lack of observation exists among students at large. A minute knowledge of anatomy and pathology is required to observe correctly the phases of a fracture from beginning to end. Few are found to acquire it. It is impossible, therefore, to escape error in the diagnosis and treatment, to say nothing of having the tact and patience so necessary in the management of fractures.

The importance of this branch of surgery demands it. They are all grave injuries, not only in respect to the deformity, the loss of valuable time, and the deterioration of health to the patient on the one hand, but also in respect to the liability of the surgeon on the other. The speediest union, and the least deformity attainable in a given case of fracture, will be had by the practitioner who has brought love of the truth to the study of healthy nutrition and repair.

The hospital furnishes a noble field for clinical study in the direction indicated.

The following is a statement of the fractures admitted during the year ending July 31, 1869, with reference to the time when they occurred, and the part injured :

August — 1 leg.

September — 1 leg, 2 forearm.

October — 1 leg, 1 forearm, 1 arm, 2 jaw, 1 rib.

November — 3 leg.

December — 2 leg, 2 thigh, 1 forearm.

January — 4 leg, 1 patella, 1 arm, 1 rib.

February — 2 leg, 1 patella, 1 clavicle.

March — 1 leg, 1 arm.

April — 1 leg, 1 forearm, 2 rib.

May — 2 leg.

June — 5 leg, 2 arm, 1 scapular, 1 jaw, 1 skull.

July — 1 foot, 4 leg, 3 thigh, 2 clavicle, 1 rib.

The list excludes cases of railroad injury in which death or amputation followed. It will be observed that of 58 cases, 16, or over 27 per cent., took place in the months of December, January and February, while 21, or over 36 per cent., occurred in the months of June and July.

The cases existing in the Hospital, July 31, are enumerated below, with so much of their history as was accessible.

1. Fracture of left humerus at upper end of middle third, March 24, 1869. Admitted June 4. Swedish emigrant, student, aged 26, of good habits. His injury occurred on shipboard, one week before arrival in New York. While walking on the deck of the vessel he slipped and fell. The fracture was dressed rudely. It was redressed and straightened, March 31, in New York. While on his way to Chicago, May 1, he was jostled against the wall, in a crowded car, and his arm refractured. On admission considerable deformity existed. A straight splint was applied, and the case recorded as one of delayed union. The splint was removed June 24, the indications of complete union being satisfactory. Two days later, while the patient was walking out by permission, he fell, and in putting out his hands to save himself, again reproduced the fracture. There was no crepitus, but marked deformity and mobility at the spot affected. A straight splint was reapplied without correcting the deviating bone wholly. He was discharged August 2. Union firm. Period, 129 days.

2. Fracture of right leg, tibia at upper end of middle third, fibula at lower end of middle third, May 14, 1869. Admitted same day. Born in Ireland; laborer; aged 40; of irregular habits. A curb-stone fell over on his side. Injury accompanied by marked deformity. A box splint was used the first three days; but, getting a chance in the night, he kicked it off, allowing the deformity to return. The fracture was readjusted in the morning, and a plaster of paris splint applied. Removed the 42nd day. Good union. Considerable tenderness. Cold douche daily. Limb kept bandaged, and at rest in an elevated position. Shortening one-fourth of an inch. Discharged August 11. Period, 89 days.

3. Fracture of right scapula at neck, June 17. Born in Sweden; farmer; aged 19; habits good. He fell from the back of a mule, in the field, striking with his shoulder. Treatment, support to the arm. Union prompt. A depression under the acromion remained, causing a slight deformity. Discharged the 52nd day.

4. Fracture of right leg, tibia at lower end of middle third, fibula at upper end of middle third, June 18. Admitted same day. Born in Ireland; teamster; aged 23; habits good. In wrestling he was thrown to the ground, the weight of his opponent falling across his leg. Deformity marked. A plaster of paris splint was applied at once, and retained five weeks, when it became uncomfortable and gave place to another for six days. Union then perfect. Shortening one-half an inch. Discharged the 53rd day.

5. Fracture of left superior maxilla-alveoli from second incisor to third molar; completely detached, June 24. Admitted same day. Bohemian; laborer; aged 55; habits good. He fell in a fit on the sidewalk, striking with his face. Displacement downward and inward. Teeth firm. A lacerated and contused wound over left malar bone and down across seat of fracture. No retentive apparatus was used, other than the four-tailed bandage. The external wound cicatrized. Small bits of necrosed bone escaped through the gums about the 21st day. Soon after, an abscess formed and broke over the recent cicatrix. The opening continued to discharge pus. The 37th day there was no union. The fragment was held in place only by mucous membrane. A

probe passed horizontally in at the external opening crossed the antrum, touching carious bone. Removal of the loose portion of the dental arch having been decided upon, the patient went out August 2, to avoid the operation.

6. Fracture of left tibia at lower end of middle third, May 28. Admitted June 9. Born in Michigan; servant girl; aged 28; habits good. She fell down a flight of twelve steps. No deformity save swelling and ecchymosis. Sat up and bathed the part with liniment the first twelve days. On admission a box splint was used for six days, then plaster of paris till the 48th day, when union was perfect. No shortening. Discharged August 4. Period, 68 days.

7. Fracture of left femur, complicated with compound comminuted fracture of left patella, June 29. Admitted same day. German; laborer; aged 21; habits good. He fell from the new city hall, two stories, without obstruction, while carrying a hod of mortar. Contusion of face frightful. Deformity of thigh marked. Patella punctured upon the center of anterior surface, and broken into four pieces. The opening admitted a finger to be passed into the joint. Synovia escaped. A wet compress was kept on the knee, and a weight of eighteen pounds fastened to the leg. There was apparently perfect bony union of the patella at the end of four weeks, without ankylosis. The bone was one and a fourth inches broader, and one inch longer than normal. The femur united readily, with considerable displacement. Shortening one and a fourth inches.

8. Fracture of right leg at middle of middle third, July 1. Admitted same day. German; laborer; aged 22; habits good. Injury caused by his jumping off a wagon which was in rapid motion. Deformity marked, the crest of the lower fragment of the tibia projecting nearly through the integument. It could not be reduced by extension. A plaster of paris splint was used, carefully avoiding compression upon the projecting fragment for fear of ulceration. The first splint was removed the third week. The second was removed August 10. Union perfect. Considerable deformity. Shortening one inch.

9. Fracture of right femur at neck, both within and without capsule, July 2. Admitted same day. Born in England; carpenter; aged 25; habits good. He fell, with scaffolding, twenty-

five feet, striking with his hip across a tool box. Symptoms: Helplessness, slight eversion, crepitation, rotation of trochanter, with a shortened radius; the head felt at rest through the spare gluteal coverings when the trochanter was moved. Three-eighths of an inch shortening. Treatment: A pad was placed beneath the trochanter, and an eighteen pound weight attached to the leg. August 8 the dressing was removed. Union perfect. Shortening slight.

10. Fracture of right clavicle at inner end of outer third, July 3. Admitted July 10. Born in Ireland; an express driver; aged 18; habits defective. Thrown from a wagon, he struck the cobble stones with his shoulder. When admitted he was wearing Hamilton's dressing. Marked deformity existed without mobility. Redressed with adhesive straps. No compress. United readily, with shortening and projection. Discharged August 7. Period, 34 days.

11. Fracture of left eighth and ninth ribs at middle, July 3. Admitted July 16. Born in Ireland; laborer; aged 40; habits good. Fell across a ditch-box. Treatment: support by bandage. Discharged Aug. 2. Period, 30 days.

12. Fracture of right femur two and a half inches above articular surface, complicated with dislocation of condyles into the popliteal space, July 3. Admitted same day. Born in Ireland; peddler; aged 54; habits good. He fell through a trap door in the third story, striking upon the lower floor. Deformity well marked. Chloroform was administered and the dislocation reduced by manipulation and extension, an operation of some difficulty. Systematic extension and counter extension were applied to the leg. Union perfect the 43rd day. Shortening, one-half inch.

13. Fracture of left leg at lower end of middle third, July 10. Admitted July 11. Born in Norway; bricklayer; aged 42; habits good. He broke through a hatchway and fell into the hold of a propeller while carrying his trunk on board. Marked deformity. A plaster of paris splint was used at once. Reapplied the 17th day. Ununited on the 52nd day. Shortening one-half inch.

14. Fracture of left leg at lower end of middle third, July 12. Admitted same day. Born in Ireland; laborer; aged 50; habits

good. He stepped through an old barn floor. A plaster of paris splint was applied for the first dressing. After the gypsum had set, it was found that the bandage was too tight. Removed the second day, on account of pain. Reapplied. Union the 37th day.

15. Fracture of right clavicle at middle of outer third, July 13. Admitted July 15. Born in Ireland; lumberman; aged 23; habits good. He fell from a scaffold, fourteen feet, striking a plank with his shoulders. Dressing by adhesive straps. No apparent deformity. Shortening three-fourths of an inch.

16. Fracture of right leg at lower end of middle third, July 21. Admitted July 22. Born in Ireland; laborer; aged 22; habits good. Received a horse kick. Deformity marked. Left tibia subject of old disease, resulting in hypertrophy; lengthening manifest. A plaster of paris splint was applied to the fractured limb at once. Considerable deformity will remain. The leg bows out, while the sound limb is abnormally straight. Disparity of length, one and three-fourths inches.

17. Fracture of right first metatarsal bone, just back of head, July 21. Admitted July 29. Bohemian emigrant; aged 23; habits good. His foot was caught between the cars. Swelling and ecchymosis. Treatment: cold wet compress. Union the 28th day.

18. Fracture of left leg at upper end of lower third, complicated with deep laceration of the inner side of calf, above and along side of fracture, July 28. Admitted same day. Born in Germany; painter; aged 23; habits good. He fell under a street car in motion. Two wheels passed over him. The first produced the fracture, the second the flesh wounds. Considerable contusion of the outer aspect of the calf. Deformity marked. The limb was extended and a support of plaster of Paris fitted to exclude the laceration. This was removed the third day on account of inflammation, and a poultice of flaxseed applied, the limb resting on a pillow. On the twelfth day, sloughs had separated, leaving deep cavities in place of the lacerations. Discharges copious from exuberant granulations. Cerate dressing used. The swelling of the foot disappeared. He emaciated rapidly, settling down in bed. On the 19th day he had a chill; pulse rose to 114; considerable uneasiness; imperfect sleep; tongue coated, thin, white; tenderness over abdomen; tym-

panites. His fever continued; emaciation progressed; the wounds discharged unhealthy pus; the loss of tissue extended, the integument becoming undermined and melting away at the margin of the wounds. Communication with the bone to a wide extent became evident. He sank lower in bed. Profuse perspiration bathed his body through the day. At night he slept, under the use of morphia. He complained very little. At length all strength failed. The ulcers grew black and gangrenous, and he died on the 32nd day.

19. Fracture of left temporal bone at upper part of temporal ridge; compound; June 21. Admitted same day. Born in Ireland; soldier; aged 31; habits intemperate. Received a horse-kick, the toe calk penetrating the skull. Opening through the integument $1\frac{1}{4}$ inches long; through bone $\frac{1}{2}$ inch long. Small spiculæ picked out. Duramater unbroken. Ice was applied at once. On the 25th day meningeal inflammations appeared. Treatment: *veratrum viride* and *belladonna*. The wound closed rapidly. He went out the 34th day, at his own request. Getting on a spree, he returned in two days with a smart attack of erysipelas. Met by the tincture of chloride of iron.

Of this group of cases, No. 1 is remarkable as illustrative of frequent causes of delayed union, namely: anæmia, insalubrity of emigrant traveling, mental dejection added to disturbance at the seat of fracture by want of care in handling. No. 2 may show the effect of too much handling, in the irritability remaining. No. 3 is a rare case. No. 7 is an example of unmistakable bony union in a comminuted compound fracture of the patella. So considerable a shortening of the femur would admit of close approximation in spite of the tonic contraction of the extensor muscle. No. 9 presented a case of difficult diagnosis as well as rarity. No. 12 is remarkable on account of the complication and the excellent result obtained, as in No. 16, on account of the unhappy dissimilarity of his legs. No. 18 is one of those cases which are rare upon the whole, yet deplorably frequent in respect to their forcible admonitions and inevitable result.

CASE 1. — *Abdominal Hemorrhage*. — L. S., a German woman, small, aged 43, had been an inmate since June 19, 1868, for chronic hypertrophy of the womb, accompanied by retrover-

sion, cervicitis, and ulceration, giving a history of instrumental delivery, frequent confinements, and hard work at service. For sixteen years, she was complaining not bearing children, having all the symptoms commonly present in such cases, culminating in hysteria. For a time after her admission, treatment was unavailing. Finally, about four weeks previous to her death, Dr. Jones amputated the anterior lip of the cervix. The cut surface was tough and fibrous, having a lateral diameter of one inch; vertical diameter, three-fourths of an inch. Her condition, after the operation, was generally improved; her menses came on at the regular period, instead of within it, as before, and continued for the usual time; the hæmorrhage from this source was excessive; however, controlled by gallic acid. Two days previous to the occurrence we are to describe, it had ceased altogether, and her condition seemed to promise a cure. The wound of the operation was at this time nearly healed. August 16, 1869, she was waked, at 2 o'clock in the morning, by profound pain in the abdomen, referred to the hypogastrium. She remained on her back through the day, in a state of complete collapse. Pain was controlled by opiate enemata. In twenty-four hours she died.

Autopsy thirty-six hours after death.—Rigor mortis; considerable layer of fat beneath the integuments; atrophy of mammary glands; transverse colon black and distended; dark fluid escaping from the cavity of the abdomen, containing grumous particles. A pint of this fluid was taken out by sponges. The colon contained a pint and a half of the same liquid; the meso-colon was widely and generally infiltrated with extravasated blood, presenting a surface of coagulum, when the sub-peritoneal connective tissue was cut. The liver and spleen were both devoid of blood; the uterus was normal in size, deviating slightly to the left side; the cervix was indurated and hypertrophied; the ovaries were atrophied, containing many cysts of small size; deviations and adhesions of the Fallopian tubes existed on both sides. No signs of inflammation of the pelvis, the extravasated matter in the abdomen being confined to the hollows on either side of the spinal column. The real lesion was not discovered. The blood was found extravasated. There was room for speculation as to its origin.

CASE 2. — *Apoplectic Aphasia*. — P. N., aged 55, born in Ireland, a laborer, was admitted July 1, 1869. No previous history of his case exists save a single statement to the effect that some time before his admission, he fell, suddenly, and lay for awhile insensible. He was partially paralyzed on admission, and dumb, though he understood. Paralysis of the sphincters was total; the right side was nearly helpless, the left enjoyed greater freedom. His face and larynx were not affected; his inability to speak was evidently of another sort. He had double cataract. His intelligence gradually failed, and he lay, finally, for several weeks, in a state of complete lethargy. Toward the last, he had slight tonic convulsions; on the sixth day they were repeated with greater violence; on the seventh day, August 25, he died.

Autopsy twelve hours after death. — Strong adhesions of the thickened duramater; about half a pint of serous fluid was found within the cranium. When the brain was inverted and lay upon its upper surface, the left anterior lobe seemed retracted; a distinct sense of fluctuation was obtained. On opening the lobe, it was found generally softened, containing, in the centre, a circumscribed pultaceous mass, the size of a walnut. The basilar artery was nearly occluded; its walls pearly and cartilaginous in texture. The same condition was found more or less extensive in the cerebral arteries of either side. The spinal cord was normal. No further examination took place. There can be little doubt as to the origin of the aphasia.

CASE 3. — *Diffused Aneurism of the Aorta*. — J. L., aged 33, born in Ireland, sixteen years in this country, a farmer of previously sound constitution, was admitted August 16, 1869, and the case recorded as malarial cachexia. In the fall of 1868, he left a farm in central Illinois, to work on the Union Pacific railroad. In February, 1869, he had several chills, for which he took quinine. In March, he quit work altogether, owing to pain between his hips. It was not constant. He had an uncomfortable bed and bad food, and consequently referred his pain to the exposure he endured. He had fever all the time, but no sweating or pain, other than that mentioned, which was worse in the morning. He continued to suffer from fever, loss of appetite, thirst, costiveness, and weak digestion; being able to eat only a little rice.

He rapidly emaciated. After arriving in Chicago, March 18, he gained, but as soon as the weather became warm he again declined. He complained of sweats, a dirty tongue, constipation, and great pain in making water—involving the left inguinal region—it seemed as if it would kill him. His urine contained considerable offensive sediment; the pain in his back grew in severity, affecting him most in the morning, and especially whenever he took a drink of water or tea; operations of oil, which he took to move his bowels, sometimes gave great pain in the left inguinal region; his testicles retracted—he had gonorrhœa the year before. On admission he was greatly emaciated; tenderness and tumefaction beginning over the spleen, extended into the inguinal region. Toward the last he had retention of urine. He sank under gradual aggravation of all the symptoms until August 29, when he died.

Autopsy twenty-four hours after death.—On opening the abdomen, dark, red discoloration marked the surface of the small intestines; the omentum was black, and adherent to parts in contact with it; black infiltration was general within the sub-peritoneal connective tissue in the walls of the entire hypogastric, left inguinal, and left lumbar regions. A huge oval mass filled the space described, limited only by the walls of the abdomen and the spinal column, extending upward to the diaphragm, and below to the cavity of the pelvis covered by the peritoneum of the lateral and posterior parietes. The hand readily broke into the tumor; the central portion consisted of a coagulum. On turning this out, sheets of fibrine, beautifully laminated, peeled up, having a deeply-rippled surface from four to six inches in diameter; layer after layer of this substance came to view, growing tougher and paler toward the bottom. The base of the tumor was found in front of the second and third lumbar vertebræ. The bodies of these bones were bare, and eaten away on either side to the depth of half an inch. A smaller division of the sack existed to the right of the column, furnishing the same proportion of fibrine and coagulum. The liver appeared about normal; the spleen was small and crowded up; the intestines were empty and crowded up to the right side; the bladder was distended; the left kidney was elongated, and its pelvis filled with urine. Owing to a somewhat unguarded dissection of the tumor, its exact origin was

not made out. The aorta seemed normal immediately above and below the eroded vertebræ. The mouth of the aneurism was not found. The central coagulum, fibrinous, stratified walls, and wide extravasation, proved incontestibly the nature of the case.

CASE 4.—*Rupture of Aortic Semi-lunar Valves*.—J. C., colored, aged 56, a roistabout, was admitted August 28. Two weeks previously, he had felt a sharp pain, with a sensation of something giving way, about his heart. He was at the time, with others, lifting a heavy piece of machinery, the whole strain of which came upon him. Immediately after this exertion, he felt difficulty in breathing. On admission, dyspnœa was marked; a blowing sound was heard over the base of the heart. Two days later he died suddenly, after rising up in bed to receive a drink of water he sank back and expired.

Autopsy.—The heart was small and rather flabby; its ventricles were full of fibrine adhering closely to the walls; two of the aortic valves were ruptured; two large, irregular rents, whose united calibre was almost equal to that of the vessel, existed in the membrane of each; the borders were intact. The apparatus was thus rendered totally insufficient. Considerable attenuation of the remaining valve, amounting to atrophy is observable. The lungs were œdematous. No other lesion was demonstrated.

ARTICLE II.—*St. Luke's Hospital*, under the care of JNO. E. OWENS, M.D.

A Case of Pertussis.—May J.; aged 6 years; admitted June 30, 1869, five weeks previous to which, according to the mother's account, she was attacked with pertussis. How long she had had the characteristic cough is unknown; but, upon admission, it was pathognomonic. The paroxysms, which were more frequent at night, occasioned a regurgitation of almost every thing that was eaten. Before instituting any treatment in this disease, one must ascertain not only the degree of violence of the paroxysms, but also their number during twenty-four hours, or during any stated period of sufficient length. In order to determine the latter, we have adopted the suggestion of Trousseau, of sticking a pin-hole in a card for every paroxysm. Since, during

the night, more or less of the paroxysms would be lost, the nurse was instructed to count from 6 A.M. to 10 P.M. The accompanying table—an exact copy of the dated card—gives the number of paroxysms during this period of the day, except the first record, the admission day, which was counted from 11 A.M. to 10 P.M. :

June 30, 1869, 28 paroxysms; July 1, 1869, 26; July 2, 1869, 15; July 3, 1869, 18; July 4, 1869, 15; July 5, 1869, 15; July 6, 1869, 13; July 7, 1869, 10; July 8, 1869, 10; July 9, 1869, 11; July 10, 1869, 8; July 11, 1869, 9; July 12, 1869, 6; July 13, 1869, 8; July 14, 1869, 3.

The patient was put upon the following treatment, July 2nd: Atropia sulph. gr. $\frac{1}{150}$, aqua f3 ij. S. To be given each morning, fasting. This dose was continued till July 7th, when an additional drachm was administered.

July 6th, about an ounce, only, of dark, offensive urine passed. From this date to the 8th, at two P.M., there was almost an entire suppression, except the occasional passage of a drachm, probably, during a paroxysm.

The patient took no atropia after the 7th. Sweet spirits nitre was given every two hours during the day (7th). Its exhibition was followed by a copious diaphoresis, but the medicine had no effect upon the kidneys. The perspiration imparted to the clothing a strong, urinous smell. The nitre, however, produced vomiting towards evening, when elaterium, gr. $\frac{1}{20}$, (Clutterbuck,) was ordered every two hours. Six doses were administered without effect, when the dose was doubled, which was followed by watery discharges, with a pretty free secretion of urine. During the suppression there was an absolute freedom from pain; neither was there drowsiness, or dryness of the throat. Ever since the exhibition of atropia, the pupils have been moderately dilated, and when it was discontinued the dilatation passed away, to some extent, but temporarily, for two or three times since the 7th the dilatation became excessive, and vision, in a degree, interfered with.

July 19.—The cough, occasionally, has spasmodic quality, but it recurs so seldom that the case seems to require no further treatment. She goes out to-day, feeling very well.

Hooping-cough, although a disease requiring very careful treat-

ment, in many cases, is an affection for which almost every old woman has her specific. In speaking of what seems to be a very successful mode of treatment, I can not do better than quote the words of the lamented Trousseau: "The active principle of solonaceous plants influences neuroses only when given in sufficiently large doses, and this influence lasts for some time; but lest the therapeutic effects should be greater than desired, the medicine should first be given in doses which are probably less than those needed for exerting a favorable action on the disease; these doses must be gradually increased until therapeutic effects begin to show themselves. As soon as this result is obtained, it is generally sufficient to continue the same daily dose, in order to increase the good effect produced. If the dose which has brought on these good results, were increased hastily, with the view of accelerating the cure, and especially if it were repeated on the same day, one might, at first, wonder at the success obtained; but unpleasant dryness of the fauces, and some disturbance of vision, which increases rapidly, would soon render a diminution of the dose necessary, and the consequence of this would be to allow the disease to reproduce itself, and to escape the influence of the mode of treatment."

The case involves several points of interest, viz.:

The marked influence which the drug seemed to possess, of lessening both the number and violence of the paroxysms; the suppression of urine — probably the effect of atropia; the efficiency of elaterium in re-establishing the renal secretion, in addition to its action upon the bowels; the copious perspiration, which imparted a urinous smell to the clothing, and which depurated the blood to a great extent, thereby protecting the nervous system; lastly, the excessive dilatation of the pupils, which occurred a number of times from the 7th to the 11th, seems to prove that the influence exerted by the salt, and possibly by solanaceous plants in general, lasts for some time, and we are justified in concluding that inasmuch as its physiological manifestation could be seen during this time, it was likewise making itself felt upon the neurosis.

112 *Randolph Street.*

Editor's Book Table.

[NOTE.—All works reviewed in the columns of THE CHICAGO MEDICAL JOURNAL may be found in the extensive stock of W. B. Keen & Cooke, whose catalogue of medical books will be seen in the present number.]

A Treatise on the Diseases and Surgery of the Mouth, Jaw, and Associate Parts. By JAMES E. GARRETSON, M.D., D.D.S., late lecturer on Anatomy and Surgery in the Philadelphia School of Anatomy; late Prof. of the Principles and Practice of Surgery in the Philadelphia Dental College, etc., etc. Illustrated with steel plates and numerous wood cuts. Philadelphia: J. B. Lippincott & Co., 1869. Pp. 700. \$7.50. Chicago: W. B. Keen & Cooke.

A GLANCE at the headings of the forty-two chapters of this work will abundantly convince the reader of the great importance of the several subjects treated, and reading of the text will demonstrate that the author has accomplished the task proposed with consummate ability and fidelity. No dental surgeon can consider his library complete, or himself fully "posted," without this invaluable book. It is the most scholarly and at the same time practical exposition of the general subjects treated upon, that it has been our fortune in a long time to meet, even if it has ever been equaled. But it is by no means to be restricted in use and value to our *confreres*, the dentists. Aside from its discussion of the pathology and therapeutics of the teeth, about two-thirds of the space is devoted to elucidation of disorders topographically associated, and here the most accomplished surgeon will find much to interest and instruct. We are especially pleased with the multitudinous new and beautiful illustrations afforded. We do not hesitate to say that in this respect the book equals, if it does not surpass, any professional book up to this time issued from the American press. It affords us unusual pleasure to advise each of our readers to buy, read and rejoice over this really *new* book. We congratulate the author upon its undoubted immediate popularity and success.

A Course of Practical Chemistry, Arranged for the Use of Medical Students. By WILLIAM ODLING, M.B., F.R.S., Lecturer on Chemistry at St. Bartholomew's Hospital, etc. With Illustrations. From the fourth and revised London edition. Philadelphia: Henry C. Lea, 1869. Pp. 261. \$2. Chicago: W. B. Keen & Cooke.

A CONVENIENT hand-book for the student, and for reference by the practitioner. It is well illustrated. In the present edition the new system of atomic weights and formulæ is employed, but no general changes in the nomenclature have been introduced.

Electricity in its Relations to Practical Medicine. By Dr. MORITZ MEYER, Royal Counselor of Health, etc. Translated from the third German edition, with notes and additions, by WILLIAM A. HAMMOND, M.D., late Surgeon-General U. S. A., Professor of Diseases of the Mind and Nervous System, and of Clinical Medicine in Bellevue Hospital, Medical College, etc., etc. New York: D. Appleton & Company, 1869. Pp. 497. \$4.50. Chicago: W. B. Keen & Cooke.

THE fact that Prof. Hammond has deemed this treatise sufficiently meritorious to induce him personally to translate and annotate it, is a good indication of its intrinsic value. He states emphatically, in his prefatory note, that it is the best which has yet appeared on the subject. The profession is certainly to be congratulated on the acquisition of further light on matters which have heretofore been largely exiled to the domains of professed quackery.

A Text-Book of Practical Medicine, with particular reference to Physiology and Pathological Anatomy. By Dr. FELIX VON NIEMEYER, Professor of Pathology and Therapeutics, Director of the Medical Clinic of the University of Tübingen. Translated from the seventh German edition, by special permission of the author, by George H. Humphreys, M.D., etc., and Charles E. Hackley, M.D., etc., (New York City.) New York: D. Appleton & Company, 1869. In two vols. Pp. 731 and 775. Cloth, \$9. Sheep, \$15.00. Chicago: W. B. Keen & Cooke.

THE fact that *seven* editions of Prof. Niemeyer's book were called for within ten years, and it had received the further

indorsement of translation into most of the principal languages of modern Europe, encouraged the American translators in the belief that it would prove acceptable to readers in this country. The last German edition had been thoroughly revised and enriched by copious additions. Although numerous text-books upon practice exist in the English language, yet, as for many of the most important researches and discoveries, both in pathology and therapeutics, we are indebted to Germany, and the concise and well-digested epitome of the results of ten years of carefully recorded clinical observations by the most illustrious medical authorities of Europe, together with many valuable and practical deductions regarding the cause of disease, and application of remedies, presented in these volumes, can scarcely elsewhere be found assembled in any single work; therefore we agree with the worthy translators in the fitness of the task which they have faithfully accomplished.

Prof. Niemeyer boldly announces himself as a defender of empirical therapeutics. Although himself a brilliant and profound pathologist, he declares "that even the dazzling progress which pathology has made has been but of little use in therapeutics; that in spite of new discoveries, our present success at the bedside is scarcely more favorable than that of fifty years ago."

Nevertheless, it is easy to see that, notwithstanding this somewhat gloomy and discouraging view of affairs, the author is far more of an optimist than he is willing to admit, and his treatise proves the fact. It takes time for even the keenest observers, and the sturdiest students, to arrive at this foundation fact, that medical science is thus far perfecting mainly by exclusion of the false and inane rather than by accretion of the new. We are learning not so much a new therapeutics as excision from the old. "Truth advances only over ruins, yet unceasingly advances."

As an evidence of the proposition that the author's real sentiments are not expressed in the *pessimist* remark first quoted, we adduce this better view:

"My conviction is, that from the present state of knowledge, from our deeper insight into the origin and relation of symptoms from the improved accessories, by means of which we are now enabled to follow the various phases and modifications of disease,

the prospect of obtaining sure and authentic therapeutic facts, by dint of accurate comparison of results, is not only by no means unfavorable, but, judging from present experience, is positively certain."

We do not find in this treatise any traces of the bold empiricism we might apprehend from some parts of the preface. But the strength of the book lies in its pathology, and its clear association of existent symptoms with existent lesions. There is a cheering absence of *twaddle* about "functional" diseases. We prize the work as a whole, and cordially commend its careful perusal.

The Mechanism of Dislocation and Fracture of the Hip, with the Reduction of the Dislocations by the Flexion Method. By HENRY J. BIGELOW, M.D., Professor of Surgery and Clinical Surgery in the Medical School of Harvard University; Surgeon of the Massachusetts General Hospital, etc., etc. With Illustrations. Philadelphia: Henry C. Lea, 1869. Pp. 150. \$2.50. Chicago: W. B. Keen & Cooke.

THIS is a luminous exposition of the subject named in the title, put before the profession, by the publisher, in elegant style, both of paper and typography, with excellent illustrations. No writer could ask for a better dress in which to make a public appearance.

As suggested by the title, this is a scientific account of the successful treatment of dislocations and fractures of the hip, first, so far as we are aware, empirically practiced by the late venerable Nathan Smith; certainly as far back as 1815, and, possibly, earlier still, and more recently recalled to professional attention by Dr. Reid, of Rochester, New York. The father of the present writer was a private student of Prof. Smith during his connection with Dartmouth College, and the writer was instructed by him, in Prof. Smith's empirical method, at least eight or ten years before Dr. Reid's paper was read before the State Society of New York. So much for priority in the method.

To those who only wish to familiarize themselves with the principles and the method, we can refer Prof. Bigelow's essay as complete and entirely satisfactory. But in our sphere as journal-

ists we are compelled to complain of the author as unfair to an unwarrantable extent in passing over, with slight notice, an essay which in every particular anticipates the explanations he affords. We allude to an essay which can not have escaped his notice, because on page 14 of his book he expressly refers to it. Although it has not escaped his notice that PROFESSOR GUNN, in 1853, published in pamphlet form a full account of the mechanism involved, it would appear that he did not read it very carefully, or he would not have stated, as he does on his page 14, that "Prof. Gunn maintains, in a paper upon this subject, that any untorn or 'undissected' portion of the capsular ligament is capable of producing the signs of hip and shoulder luxation." The fact is that Prof. Gunn expressly specifies the *anterior* and *inferior* portion of the capsular ligament, that part which Prof. Bigelow dignifies by the new name, the **Y** ligament. So far as we are able to see, this author has added nothing to Prof. Gunn's exposition of the subject, save only this new name of that portion of the capsular ligament—the *anterior* and *inferior*—heretofore known as the *ilio-femoral*, but which he christens as the **Y** ligament. In the subsequent editions, to which this little work, from its intrinsic merits, will assuredly pass, we trust Prof. Bigelow will do himself the honor, and Prof. Gunn the justice, to set this matter right before his readers.

The Science and Art of Surgery. Being a Treatise on Surgical Injuries, Diseases and Operations. By JOHN ERICHSEN, Senior Surgeon to University College Hospital, etc., etc. From the fifth enlarged and carefully revised London edition. Illustrated with six hundred and thirty engravings on wood. With additions by JOHN ASHHURST, Jr., A.M., M.D., Vice-President of the Philadelphia Pathological Society, etc., etc. Philadelphia: Henry C. Lea, 1869. Cloth \$7.50, sheep \$8.50. Pp. 1,228. Chicago: W. B. Keen & Cooke.

THIS is a superb edition of a work which is now classical and standard. It is unnecessary to say that it is pre-eminent among all works on the subject. Comprehensive as were the previous editions, the present one has been greatly enlarged, and with the judicious and valuable additions of the American editor, constitutes in itself a sufficient encyclopædia of surgical science and

art. It has been remodeled and whole chapters rewritten. Many of the old wood-cuts have been withdrawn, and nearly a hundred new ones of greater value introduced. Not the least valuable part of the book is the copious index, which enables the busy practitioner to refer at a glance to the subject which he wishes to examine.

Third Annual Report of the Metropolitan Board of Health of the State of New York, 1868. Albany: Printing House of Charles Van Benthuysen & Sons. Pp. 635.

THIS Report is one of the most valuable contributions to sanitary science. It illustrates the liberality and wisdom of the great State of New York in a manner which we should like to see imitated in the great States of the Northwest. In addition to the usual matters of such reports, it contains an exhaustive examination of the "Cattle Disease," "Texas Fever," etc., which has caused such great anxiety during a few years past. The lesions taking place are finely illustrated by a large number of splendid chromo lithographs.

A Guide Book to Florida and the South, for Tourists, Invalids and Emigrants. With a Map of the St. John River. By DANIEL G. BRINTON, A.M., M.D. Philadelphia: George Maclean, 719 Sansom Street, 1869. Pp. 136. \$1.

FOR those contemplating a sojourn in the South during the cold season, this little book will be found to contain many useful details, as to preparation for the journey, what to take along, routes, hotels, prices, etc., etc.

Circular No. 2. War Department, Surgeon-General's Office, Washington, January 2, 1869. A Report on Excisions of the Head of the Femur for Gun-Shot Injury. Washington: Government Printing Office.

THE Medical Department of the Army, through its most efficient officers, is making contributions to our profession unprecedently rich. Circular No. 2 is a report on the subject named in the title, by Assistant-Surgeon George A. Otis, who introduces his work with a full history of the operation.

He then gives, first, a detailed account of the sixty-three excis-

ions of "the head, or of the head, neck, and trochanters," which are all that are sufficiently authenticated, in all particulars, "to make them available for statistical purposes." Then follows a brief notice of the "rejected cases." "Of the sixty-three operations, forty-eight were performed by Union, and fifteen by Confederate surgeons."

The cases are divided into primary, intermediate and secondary operations, a division the importance of which will be recognized by every surgeon of experience. Primary operations were thirty-two; intermediate, twenty-two; and secondary, nine in number.

The primary operations were all made within twenty-four hours of the reception of the injury. Two were successful. Mean duration of life in the thirty unsuccessful cases, was "a little over seven days." One patient struggled out sixty days, which materially increases the average.

The intermediate operations were made between the completion of the second and the twenty-eighth days after the injury. Two of these were successful. Average duration of life in the unsuccessful cases, was twelve and a half days.

Of the secondary operations, one was successful. Mean duration of life in the eight unsuccessful cases was sixteen days, while one poor fellow held out one hundred days.

The interval of time which elapsed between the reception of the injury and the operation averaged two and a half months.

Seventy pages of the report are devoted to a consideration of the subject of "excisions at the hip, compared with temporization," in which the reporter says: "Expectant treatment is to be condemned in all cases in which the diagnosis of direct injury to the articulation can be clearly established."

Pamphlets.

Advice on the Uses and Abuses of Spectacles and Weak Sight.

By Dr. JOHN PHILLIPPS. Pp. 94. Published by the author, 168 Clark Street, Chicago. Price, twenty-five cents.

A USEFUL monograph on the subject, illustrated by wood-cuts, and containing valuable hints to persons with impaired sight.

On External Perineal Urethrotomy; or, an Improved Method of External Division of the Urethra in Perineo, for the Relief of Obstinate Stricture. With remarks on the preparatory and after treatment. By J. W. S. GOULEY, M.D., Professor, etc., University of New York, Surgeon to Bellevue Hospital. D. Appleton & Co., New York. From the author.

The Annals of Iowa. Published quarterly by the State Historical Society, at Iowa City. July, 1869. Edited by SANFORD W. HUFF, M.D., Corresponding Secretary.

Transactions of the Medical Association of the State of Alabama. Annual Session, 1869, at Mobile, with proceedings of the meeting held for reorganization, at Selma, March, 1868.

Hygiene in its Relations to Therapeutics. A paper read before the New York Journal Association by ALFRED L. CARROLL, M.D.

Transactions of the Indiana State Medical Society, at its Nineteenth Annual Session, held at Indianapolis, May, 1869.

Feticide, or Criminal Abortion. A lecture introductory to the course on Obstetrics and Diseases of Women and Children, University of Pennsylvania. Session 1839-40. By HUGH L. HODGE, M.D. Philadelphia: Lindsay & Blakiston, 1869. Chicago: W. B. Keen & Cooke. Paper 30c., cloth 50c.

Carbolic Acid—Its Action and Uses. By CHARLES F. J. LEHLBACH, M.D., of Newark, New Jersey. Reprinted from the transactions of the Medical Society of New Jersey, 1869.

Surgery of the Cervix, in connection with the treatment of certain Uterine Diseases. By THOMAS ADDIS EMMET, M.D. Read before the Medical Society of the County of New York, February, 1869. From the author.

Catalogue of the Graduates of Jefferson Medical College, of Philadelphia, 1826—1869. Ledger Job Printing Office.

Transactions of the Medical Society of the State of Pennsylvania, at its Twentieth Annual Session, held at Erie, June, 1869. Fifth series. Part Second. Pp. 567.

Myxoma, or Hyperplasia of the Villi of the Chorion. By ALEXANDER SINCLAIR, M.D., etc. Boston: David Clapp & Son, 334 Washington Street. 1869. From the author.

Puerperal Eclampsia. By C. C. F. GAY, M.D. Buffalo, August, 1869. From the author.

The Half-Yearly Abstracts of the Medical Sciences. Being a Digest of British and Continental Medicines, and of the Progress of Medicine and the Collateral Sciences. Vol. XLIX. July, 1869. Philadelphia: Henry C. Lea, 1869. Pp. 293. \$2.50 per annum, in advance. Single copies, \$1.50.

Half-Yearly Compendium of Medical Sciences. Part IV. July, 1869. Pp. 321. Philadelphia: S. W. Butler, M.D., 115 South Seventeenth Street. \$3 per annum, in advance. Single numbers, \$2. For 1868 and 1869, Nos. 1 to 4, inclusive, \$5.

The Physician's Visiting List for 1870. Nineteenth year of its publication. Philadelphia: Lindsay & Blakiston. Chicago: W. B. Keen & Cooke.

Foreign Items.

BARON LARRY, in his important work on Trephining, in traumatic lesions of the skull (published by Victor Masson & Co., Paris), thus summarizes the indications and contra-indications for this operation.

Indications.—Trephining should be practiced in traumatic lesions of the head, if symptoms, clearly localized and circumscribed, persist, and if all other means are unavailing, in the following cases:

1st. In fractures of the vault, by perforation or with imbedding of the fragments, whenever the injury to deep-seated parts occasions grave and continuous consequences, whilst remedial measures other than trephining may be impossible or inefficacious.

2nd. In fractures complicated with the perforation of foreign bodies of the thickness of the cranium, or with penetration into the superficial layers of the brain with persistence of symptomatic accidents, if the extraction of the foreign body can be effected in no other way.

3rd. In the different mechanical lesions of the head, complicated with grave and persistent cerebral symptoms, such as contusion and compression of the brain, or even prolonged hemiplegia with extravasation of blood or of pus, considered as circumscribed, provided that the lesion can be localized, and provided, especially, that active therapeutics remain insufficient.

Contra-Indications.—Trephining should not be attempted in cases of lesion speedily or necessarily fatal, nor in those presumed to be curable by other means.

1st. When a foreign substance, lost in the deep portions of the brain, has passed beyond the reach of instruments.

2nd. If blood or pus, extravasated within the cranium, does not appear to form a focus in relation with the opening in the bone.

3rd. In every case of fracture not complicated with firm imbedding of the fragments, nor with prolonged phenomena of compression or paralysis.

4th. In the condition of cerebral commotion or coma, with or without localized lesions.

5th. In indeterminate or epileptiform convulsions, not persistent and susceptible of cure.

6th. In diffuse inflammation of the brain or its membranes, when clearly appreciable.—*Gazette des Hôpitaux.*

On Thursday, August 19, M. Bailly, in the course of a clinical lecture upon a case of very profuse uterine hæmorrhage supervening in the seventh month of pregnancy, assigned for metrorrhagia in pregnant women, the following causes.

The first, and beyond doubt much the most frequent cause

during the last months of pregnancy, is the "*vicious*" insertion of the placenta into the uterine neck.

The second, is the rupture of the utero-placental vessels (the insertion of the placenta being normal) under the influence of a congestive molimen.

The third source of this phenomenon the lecturer locates in the vessels of the mucous surface of the uterus, apart from the placenta, which ordinarily but slightly developed, may occasionally, under the menstrual impulse, give origin to a flow of blood.

These three sorts of hæmorrhage all originate within the body of the uterus. The remainder pertain to the neck, and of these, the first results from cancerous disease located in the neck, which becomes predisposed to hæmorrhage by reason of the access of blood to the uterus induced by pregnancy. These hæmorrhages occur most frequently during the latter period of pregnancy, for the reasons applicable to cases of placenta prævia.

But again, aside from any cancerous, syphilitic or other malignant disease, the mucous surface of the uterine neck, during pregnancy, sometimes becomes granular, and these granulations becoming fungous and very vascular, bleed at the slightest touch, and they are, moreover, peculiarly sensitive at the menstrual epoch. Several examples of this sort have even been known to occur at the first menstrual period subsequent to the removal of the ovaries of the body, and even of the supra-vaginal portion of the neck of the uterus. This form of hæmorrhage is frequently, although not invariably, indicative of pre-existing disease of the cervix.—*Gazette des Hopitaux*.

M. GOOD thus tabulates the statistics of 112 coxo-femoral resections performed subsequent to 1860:

Of the 112 cases, 52 (or 46.43 per cent.) were successful and 60 (or 53.57 per cent.) fatal. In relation to the nationalities, the cases are arranged as follows:

In Germany, 34 operations, 12 (35.29 per cent.) successful.

In England, 32 operations, 21 (95.62 per cent.) successful.

In America, 29 operations, 16 (55.17 per cent.) successful.

In France, 14 operations, and only 2 (those of MM. Sédillot & Bachel, a Strasbourg) successful.

In Russia, 3 operations, 1 successful.

Of the 52 cures, 19 walked without support, and 9 with a simple cane. M. Good compares with these the results of the expectant treatment at the Hospital St. Eugenie (Paris), of 12 cases of suppurating coxalgia. One only resulted in spontaneous recovery, three remained stationary during several years, and eight died.—*Gazette des Hopitaux*.

M. LIEBREICH has communicated to the Academy of Sciences (Paris) three experiments made to test the anæsthetic and soporific properties of chloral. terchloride of aldehyde. The first, a hypodermic injection of one 1.57 gramme, in the case of an insane epileptic troubled with hallucinations and wakefulness. Five minutes afterwards the patient fell into a deep sleep, which continued four hours and a half. The two other experiments were made in the Charity Hospital, Berlin, under the direction of Professor Bardeleben. The first of these was followed by deep sleep, of several hours duration. The second was marked by decided anæsthesia, the particulars of which are detailed.

A CASE of metrorrhagia, of more than one month's duration, has been successfully treated, at the Necker Hospital, under the direction of M. Potain, by hot baths. There was no lesion of the uterus, and only a slight enlargement of the neck.

M. BOURDON, at la Charité, has succeeded in preventing the pitting of small-pox, by covering the face with cerate and sprinkling this thickly with starch, so as to form a paste.

APROPOS to the discussion upon animal vaccination, M. Herard has made a comparative study of animal and Jennerian (human) vaccination, in four hundred and ninety-three new-born infants, and has been unable to detect any difference whatever between the effects of the two varieties of virus. They were identical.

Editorial.

Change of Publisher.

It is with the most pleasurable sense of relief, and high anticipation for the future, that the Senior Editor and Proprietor of this JOURNAL announces that he has enlisted the widely-known Publishing House of W. B. Keen & Cooke in its publication. His own personal and professional engagements have been such that it was simply impossible for him to satisfactorily, or even unsatisfactorily, attend to the varied business of publisher, and devote any time whatever to editorial duties. A concurrence of circumstances, easily surmised, unnecessary here to be repeated, placed the Proprietor in such a position that he must either abandon the editorial chair for the publisher's ledger and desk, or else withdraw wholly from any connection with the JOURNAL. In this dilemma he sought a real and not as heretofore a nominal rescue from the business management in once more changing publishers.

It is not at all necessary to introduce Messrs. Keen & Cooke to our readers. They have the capital, the facilities and the enterprise which would make the JOURNAL an assured success almost without editorial management.

Thus relieved from the cramping cares of pecuniary business, (which, above all existing things, we intensely abominate,) we turn with something like glee to the pleasant task of chronicling the advance of medical science and art. To that task, solely, we shall lend our best energies. We shall herein air neither our private griefs nor those of others. We shall grind the axes of no man or set of men. We shall ignore all quarrels about the "code," and shall seek to "elevate the profession," simply by recording what it is doing and finding out.

This number will go to many who have not as yet been subscribers. We trust they will send their subscriptions to the Publishers, and the ripe results of their knowledge to the Editors.

J. A. A.

Watermelon in Dysentery.

CUCUMBERS have always had a bad reputation in "bowel complaints," and watermelons, cantelopes, etc., have been almost equally liable to criticism. But recent correspondents of the

Boston Medical and Surgical Journal boldly report cases of recovery after ingestion of these much-abused vegetables. Whereupon the witty editor of the *New York Medical Gazette* writes: "If this sort of thing goes on, we shall expect good results from a diet of fried pork, lobster salad, and hot plum-cake in enteric troubles generally." To which, in all seriousness, we reply, worse treatment has happened. In the late war many of the most obstinate "enteric" cases recovered rapidly when allowed unrestricted indulgence of their appetites in the cook-room. Raw onions, turnips, carrots, green corn, and half-ripe fruits, even, were often found salutary to the soldiery. If it is objected that the vegetable diet was better borne on account of the scorbutic diathesis usually present in these cases, we reply, scorbutus is but a name, and a similar condition is often produced in civil life by mistaken habits based on mistaken physiological notions. Nothing is more frequently met than the wonder of patients, or their parents, that they should have diarrhœas or dysenteries when they have so carefully abstained from "fruits and green things." During epidemics of cholera, diarrhœa or dysentery, this scrupulous caution is more likely to be carried to excess, and our experience is that the most cautious are the first to fall victims. In the progress of many long-continued diseases the system is liable to fall into similar impoverishment, from careful exclusion, from the diet table, of what are really essential ingredients.

We trust not to be misapprehended, for it is unquestionably true that when the digestive organs have not been habituated to the use of any particular kind of food, they are likely to be intolerant of it. But this no more proves that they are not needed by the system, than the fact that a starving man can not be at once permitted to satisfy his appetite, without extreme danger, proves that food is in itself injurious to him.

It is exceedingly difficult to overcome this *fruit-and-vegetable-phobia*, on the part of both physicians and patients. The simple fact is, without resorting to any very gross humoralism, a large number of these cases are caused by an effort at elimination, by the intestinal mucous-membrane, of effete and poisonous matters which the kidneys fail to excrete. These much maligned vegetables furnish pabulum to the blood, and stimuli to the kidneys, very often beyond the power of any so-called medicine to imitate.

The watermelon and cucumber cures need astonish no one. The great trouble is, we shall have watermelon and cucumber curers of dysentery and diarrhœa who will speedily kill some people whose dysenteries or diarrhœas have quite a different pathology, and then the vegetables, like many, sometimes, ambitious and vaunted members of the *Materia Medica*, will go away into deep disgrace. The proper relation of food and force being, by and by, better understood, we may hope to combat disease by such agencies only as nature employs in building up the human body.

Professional Perspicuity--Again.

IN view of the indignation aroused by a certain editorial criticism, headed "Professional Perspicuity," in the August number of the JOURNAL, upon a report of an *alleged* case of tetanus, contained in the July number of the *Chicago Medical Examiner*, we desire to explain, for the benefit of some who appear not to appreciate the fact, that a medical journal is designed to be, not a receptacle for literary rubbish, nor an advertising medium for the elevation of individuals into notoriety, but a source of *reliable* information to the profession; a record of *facts*; an index of scientific progress; and a medium for sifting the wheat from the *chaff*, the true from the *false*, in the current professional literature of the day. To the accomplishment of this object all our efforts shall be directed, and to that end we invite from *professional gentlemen* desiring to co-operate in the work, contributions of their views and opinions upon such topics as may interest the profession at large, whether in the shape of essays, or reports of cases which have *actually occurred under their observation*, reserving to ourselves the right to reject all which may, either from lack of scientific or practical interest, from *unreliability* of authorship, from *improbability* of incident, or from manifest *fraud*, seem to us to merit a place in the waste basket. To communications coming under the latter category, whether reaching us directly, or through the media of other journals, we shall show no mercy, and their authors need expect none. To all such who now, or hereafter may consider themselves aggrieved by legitimate criticism, we say, keep out of print; do not endeavor to exchange respectable obscurity for disreputable notoriety.

W. H.

Hospital Reports.

THE attention of our readers is especially directed to the Hospital Reports contained in the present number. Each number of the JOURNAL, hereafter, will contain a condensed summary of every thing interesting which has occurred in the hospitals of Chicago during the preceding month. These reports will be prepared under the immediate supervision of gentlemen of the professional staff of each hospital, respectively, and the profession at large will find in them an invaluable source of clinical instruction, and index for practical reference.

The city of Chicago possesses hospital facilities whose magnitude and excellence have been hitherto not properly appreciated by the profession at large, and we shall make the JOURNAL the medium for rendering this source of professional knowledge available to our readers. We here tender our acknowledgments to Dr. Fenn, of Cook County Hospital, and Dr. Owens, of St. Luke's, for valuable contributions.

W. H.

Appointment.

AT the last meeting of the Trustees, Dr. W. W. Allport was unanimously elected Surgeon Dentist of St. Luke's Hospital.

Ovariectomy.

DRS. BENSON and YANDELL, of Louisville, Kentucky, and Dr. Tom O. Edwards, of Lancaster, have each recently successfully performed ovariectomy.

Medical Portraits.

A SERIES of 100 photographs of eminent European medical men is offered for sale by Dr. W. H. Helm, of Sing Sing, N. Y. The likenesses are excellent, and are sent by mail at the low price of \$15 for the 100, or \$2 per dozen. They can probably be procured in this city of W. B. Keen & Cooke.

Our Home Physician.

WE have received specimen pages of a new work with this title (by George M. Beard, M.D., of New York, assisted by Professors D. B. St. John Roosa and B. Howard), intended as a popular treatise on medical practice, with the praiseworthy object of displacing the various empirical "Guides to Health," etc., etc., with which the country abounds.

From a glance at the pages sent us, we should judge it well adapted for the purpose, but we are unwilling to fully indorse it without examining the work as a whole. We are unwilling to forestall either our own or the public's opinion. The question of the real value of such books is still an open one. We believe that the best way for all concerned is to popularize knowledge of *scientific* physiology, and displace the quack varieties thereof, which every where abound.

PUBLISHERS' NOTICE.

FROM the date of the present number, the undersigned will assume the publication of the CHICAGO MEDICAL JOURNAL, and the exclusive management of its financial and business affairs.

In undertaking this enterprise they are actuated by a desire to extend their relations with the profession with which they have been closely identified many years as the purveyors of medical literature in the Northwest. Believing that this intimate association, by familiarizing them with the literary wants of the medical profession, has given them peculiar and unusual facilities for the satisfactory prosecution of such work, they confidently ask the countenance and co-operation of old friends who have sustained the JOURNAL during the twenty-six years past, both by continued subscription and frequent communication of the important results of their experience and observation to its pages.

The typographical and general mechanical excellence of successive numbers will be brought up to an equality with the best magazines of the country, and especial attention will be paid to its prompt issue at or before the monthly dates. The monthly form will be resumed, it having been found by experience that this gives better opportunity for a variety of matter, without detracting from space for admission of elaborate essays.

Specimen copies will be furnished without charge. To all new subscribers remitting subscription price, \$3, for 1870, the remaining numbers of the present year will be sent free. Address,

W. B. KEEN & COOKE,
113 and 115 State Street, Chicago.

Rush Medical College.

The opening exercises of the Twenty-seventh Annual Session occurred Wednesday evening, Sept. 29th. Introductory Lecture by Prof. E. L. Holmes. An unusually large number of students attended. Further particulars will be given the ensuing month, as our manuscript report has been unfortunately mislaid.

Editorial Notes.

American Pharmaceutical Association.

THE recent meeting of this Association, in this city, (Sept. 7, 1869), was highly successful and satisfactory to the attendants. Delegates enrolled themselves from almost every portion of the country.

Mr. E. H. Sargent, of this city, was elected President for the ensuing year.

The next meeting will be held on the second Tuesday of September, 1870, in the city of Baltimore.

The most important part of their proceedings was discussion of appropriate legislation.

The following is a synopsis of the proposed law to regulate the practice of pharmacy, and the sale of poison, and to prevent the adulteration of drugs and medicines:

Section 1 requires that all shops kept open for the sale and dispensing of medicines and poisons, shall be under the oversight of a registered pharmacist or assistant pharmacist.

Sections 2, 3 and 4 require that no person shall use or exhibit the title of pharmacist or assistant pharmacist unless registered according to law; that no one can register unless a graduate in pharmacy, a practicing pharmacist or assistant pharmacist; that graduates must be from some college of pharmacy in the United States, or from such institution in a foreign country.

Sections 5 and 6 require the appointment of a Pharmaceutical Board by the Governor of each State, and that this board shall examine all candidates for certificates, and cause all prosecutions, and that all members shall pay ten dollars to the board.

Section 8 requires that all registered pharmacists shall furnish their addresses, for which a fee is to be paid. All changes are to be duly sent to the board.

Section 9 imposes a penalty for any false representations in the procuring of registration, by imprisonment from three to twelve months.

Section 10 imposes a fine of fifty dollars for the offence of selling any drugs or medicines, unless he be a registered pharmacist, to be paid to the board.

Sections 11 and 12 authorize the fining of any pharmacist for refusing to comply with the regulations of the board. This is not to interfere with the acts of any practicing physician in the line of his profession.

Section 13 imposes a restriction on the sale of any medicines

or poisons, unless the name of the same be placed on the bottle, and the address of the seller. It is the duty of all persons so selling to have the address of the person purchasing, and his name, with a statement of the objects such medicines or poisons are to be used for.

Sections 14, 15 and 16 prohibit the adulteration of any medicines, and require that all prescriptions shall be kept in a book for five years. For adulteration the fine may be \$1,000, and imprisonment may be inflicted.

Pending consideration of these propositions, on motion of Dr. Squibb, of New York, the Association adopted the following series of resolutions:

Resolved, That the draft of a law to regulate the practice of pharmacy proposed by the committee of the Association, appointed for that purpose, be accepted and published in the proceedings of the Association, as being one method whereby the objects of this body, in regard to that subject, might be attempted; and that, as a method which embraces many useful details, arranged with great care and labor, it is recorded and published as well adapted to be useful to the legislatures of the different states, whenever they may see fit to respond to the earnest desire and call of this Association, and of the community at large, for enactment upon this subject.

Resolved, That the difficulties of constructing a form of law proper to be indorsed and recommended by this Association for general application in all the states, are such that we must be satisfied with enunciating the broad principles which, in our judgment, should direct any and all legislation upon this important subject.

Resolved, That we see with alarm and regret the rapid increase in the number of accidents which occur from mistakes and mismanagement in dispensing medicinal substances, and that we earnestly desire to see these casualties checked and controlled.

Resolved, That we regard the ignorance and irresponsibility of many who engage in the practice of pharmacy, without the proper qualifications, as the principal cause of such casualties.

Resolved, That a proper degree of education and qualification should be secured by law, and that all proper measures for educating and qualifying persons for duties so important, should receive more encouragement and protection from the law than they have hitherto done.

Resolved, That the report of the committee, embracing the proposed draft of a law, of the action had in this Association upon that report, and of these resolutions, be printed in pamphlet form; and that ten copies be sent to the governors and speakers of the legislatures of the different states of the American Union.

We regret that an additional resolution was not adopted, reprehending the too common practice of druggists prescribing for the patients of physicians who patronize them.

Loot.

PROF. J. LEWIS SMITH, of New York, recommends, in primary bronchitis, for an infant one year old, a teaspoonful of the following mixture, every two or four hours:

R. Spts. ætheris nitrosi,	-	-	-	-	-	-	f ʒ j
Syrupi ipecacuanhæ,	-	-	-	-	-	-	-
Olei ricini,	-	-	-	-	-	-	aa f ʒ ij
Syrupi tolutani,	-	-	-	-	-	-	f ʒ vij

Another eligible formula is the following:

R. Syrupi ipecacuanhæ,	-	-	-	-	-	-	f ʒ ij
Potassæ acetatis,	-	-	-	-	-	-	gr. xvj—ʒ ss
Aquæ anisi,	-	-	-	-	-	-	f ʒ xiv

M. Dose: One teaspoonful for an infant of six months. If there is decided febrile action, tincture of digitalis, one or two drops, according to the age, may be added to each teaspoonful.—*Medical Bulletin.*

The *rationale* of this is simply elimination by the kidneys. The so-called *expectorants*, when analyzed in effect, will be found to prove such only in so far as they act as diuretics.

Treatment in Diarrhœa of Infants.

DR. SMITH (*Med. News and Library*), in his valuable papers on the "Wasting Diseases of Infants and Children," recommends the following prescription, if the bowels are rather loose, with dark, slimy, offensive stools:

R. Tinct. opii,	-	-	-	-	-	-	m viii
Ol. ricini,	-	-	-	-	-	-	- ʒ j
Syrupi zingib,	-	-	-	-	-	-	-
Mucilag. acaciæ,	-	-	-	-	-	-	aa ʒ j

M. S.—A teaspoonful three times daily. In the screaming fits, accompanied by constipation, this combination of castor-oil with laudanum is very valuable.—*Medical Record.*

This is another case wherein it will be found that to be effectual elimination by diuresis must be secured. See, on another page, observations on the use of fruits in diarrhœa.

In those cases of HEADACHE resulting from gastric difficulty, eight or ten minims of chloroform given internally will materially

remained that the operation had been performed on a living person. M. Nelaton estimated that the patient should have survived the trepanning about eight days. — *Id.*

Another evidence that there is nothing new under the sun.

Rich Beef Tea.

THE addition of a small tablespoonful of *cream* to a teacupful of beef tea renders it richer and more nourishing.

It was formerly the habit, in directing beef tea, to order all the fat globules to be carefully skimmed from the top, whereby the "Hamlet was left out." Subsequently, the loss was attempted to be made up by administration of Cod Liver Oil. The cream is an improvement.

IN every 100,000 tons of the WATER supplied to London, the solid impurity averages from twenty-eight to forty-two tons; in Edinburgh, from eleven to fourteen tons; Bristol, twenty-eight tons; Manchester, six tons; Dublin, six tons; and Glasgow, only three tons. — *Exchange.*

It is doubtful if any city on the globe has purer water afforded it than this city of Chicago, and the consequence of this improvement on the past is patent to even the least observant in the general increase of health and longevity. Now let combined efforts be put forth to purify the atmosphere, both in and out of the houses.

M. MAILLOT, ex-president of the Conseil du Sante des Armees, counts as a great service rendered to his country his introduction into Algeria, in 1853, of the treatment of DYSENTERY by large doses of bismuth, warmly recommended by M. Monneret. In that year, four pounds of bismuth were forwarded to that country, at his request, for trial, under his observation. The result has been, that it has grown constantly in favor with the regimental surgeons, who have had it included in the troop medicine-chest; and that, in 1868, 920 lbs. weight were required for the treatment of dysenteric affections in the army of Algiers. — *British Medical Journal.*

Much of the good effect of the introduction of bismuth in the treatment of dysentery, we are fain to believe, is from its replacing the powerful but injurious medication previously in vogue. Astringents, cathartics and mercurial "alteratives" have less relation to the cure of the disease than the too general reliance

upon them would seem to involve. The great question even in dysentery is: *What is the matter?*

CARBOLIC ACID is running almost precisely the same race with creosote twenty-five years ago. Dr. McCall Anderson, of Glasgow, is experimenting on "the virtues of certain new (!) remedies" for cutaneous diseases. Prominent among these are coverings of vulcanized India rubber, and India rubber cloth, and the internal use of carbolic acid. Among others, he published the following cases in the *Glasgow Medical Journal*:

Eczema of hands, erythema papulatum, and psoriasis palmaris he treated with *India rubber gloves*. Several cases of psoriasis he treated by carbolic acid. R. Acidi Carbol. Cryst. \mathfrak{z} iss, Glycerini q. s., aq. distil. \mathfrak{z} vi, M. Sig. — A teaspoonful in a wine-glass of water, three times a day, on an empty stomach.

W. ST. JOHN COLEMAN, in the *London Lancet*, speaks of his success in treating chronic eczema, eczema rubrum eczema facii, and an obstinate case of impetigo larvalis, with carbolic acid. To an eight-ounce phial of glycerine and water he added about \mathfrak{M} xx of pure carbolic acid, and applied it locally night and morning.

DR. MORITZ KOHN, discussing lupus erythematosus, places most dependence on external remedies. The local treatment he recommends consists in removing the accumulated sebaceous secretion by means of applications of oils and various soaps; the use of "spiritus saponatus kalinûs" (sapon. viridis, \mathfrak{z} iv; sp. vini. rect. \mathfrak{z} ij; spir. lavand. \mathfrak{z} ij); liq. potassæ; carbolic acid and the mineral acids; also sulphur (in powder), solid nitrate of silver, chloride of zinc paste, and the emplastrum mercuriale. — *Journal of Cutaneous Medicine*.

OINTMENT FOR HÆMORRHOIDS, by the late Prof. W. R. Fisher:

Take of Sulphate of Morphia,	-	-	-	three grains.
Extract of Stramonium,	-	-	-	thirty "
Olive Oil,	-	-	-	sixty "
Carbonate of Lead,	-	-	-	sixty "
Lard Cerate,	-	-	-	three drachms.

Rub the extract, if not uniformly soft, with a few drops of water; add the powders and olive oil, and rub till perfectly smooth, and then incorporate them with the cerate. — *American Journal of Pharmacy*.

A better plan is to incorporate the active ingredients with cacao butter, and use as suppositious.

Cure for Warts.

Warts may be readily cured by cutting a hole in a piece of sticking plaster, the size of the wart, applying the sticking plaster so that the wart protrudes, and then using —

R	Caustic potash,	-	-	-	-	-	-	-	ij
	Gum arabic,	-	-	-	-	-	-	-	ss
	Flour sufficient.	-	-	-	-	-	-	-	

M. — Make a paste.

S. — To be left on for a few hours. — *Boston Journal of Chemistry.*

DR. BOULOU has devised the following plaster for rheumatic and neuralgic pains :

R	Empl. plumbi,	-	-	-	-	-	-	℥ xvj
	Ext. pini sylvestris,	-	-	-	-	-	-	
	Ext. Belladonna,	-	-	-	-	-	-	aa ℥ jss

Spread evenly over fine strong linen, so that every square inch should contain two grains of the active ingredient. — *Medical Archives.*

Sulphite of Soda in Chronic Cystitis.

MR. L. WILLCOX, late house-surgeon of King's College Hospital, recommends the use of sulphite in those cases of chronic cystitis where the urine decomposes before it is eliminated. He finds that by the employment of sulphite of soda all the putridity disappears, and the urine becomes clear and colorless. — *Canada Medical Journal.*

DR. J. WARING CURRAN recommends the iodide of ammonium in diseases of the glanular system. The following are his prescriptions in Goitre :

R	Ammonii iodidi,	-	-	-	-	-	gr. xv
	Spiritus chloroformi,	-	-	-	-	-	℥ ij
	Aquæ camphoræ,	-	-	-	-	-	ad ℥ viij

M. S. — ℥ j ter in die.

R	Ammoni iodidi,	-	-	-	-	-	℥ ij
	Glycerine,	-	-	-	-	-	℥ ij
	Adipis benzoat,	-	-	-	-	-	℥ jss

Ft. — Unguent. — *Journal of Chemistry.*

Hypodermic Injection of the Tincture of Calabar Bean in Epilepsy.

DR. F. C. WILSON, of Virginia, reports several cases of epilepsy, which he treated by injecting hypodermically ten to twelve minims of the tincture of calabar bean. He alleges that, in patients having a series of epileptic convulsions, recurring at

intervals of eight, ten or twenty minutes, the paroxysms at once ceased, and that they soon dropped off into a quiet sleep.

The doctor says that the calabar bean may be combined with strychnine, thus enabling a much larger dose of each to be given than would be safe if given separately.

We think these experiments sufficient to recommend to the profession its further trial in this disease. Will any one give us the result of their experiments with this remedy?—*Richmond and Louisville Medical Journal.*

Dr. Brown-Sequard's Usual Prescription in Epilepsy.

℞	Potass. iodidi,	-	-	-	-	-	-	-	℥ ij
	Potass. bromidi,	-	-	-	-	-	-	-	℥ iij
	Ammon. bromidi,	-	-	-	-	-	-	-	℥ iiss
	Potass. bicarb.,	-	-	-	-	-	-	-	℥ ij
	Inf. columbæ,	-	-	-	-	-	-	-	℥ ½ vi

M. Sig.—A teaspoonful before each meal, and three teaspoonfuls at bed-time, with a little water. The medicine should be pushed until anæsthesia of the fauces is produced, and an acne-like eruption appears on the neck, face, shoulders, etc. Continue treatment for sixteen months after the convulsions have ceased, an occasional purgative being given.

Another Formula of the Same.

℞	Potass. bromidi,	-	-	-	-	-	-	-	℥ vj
	Ammon. bromidi,	-	-	-	-	-	-	-	℥ iij
	Potass. bicarb.,	-	-	-	-	-	-	-	gr. xv
	Tr. columbæ,	-	-	-	-	-	-	-	℥ iss
	Aquæ,	-	-	-	-	-	-	-	℥ iij

M. Sig.—One to two teaspoonfuls three times a day, before meals, in a little water.

N.B.—The above remedies may prove very serviceable in some cases of emphysema, hooping-cough, and nocturnal emissions. — *Physician and Pharmaceutist.*

Hypodermic Injection of Morphia in Sun-Stroke.

DR. J. H. HUTCHINSON (*Pennsylvania Hospital Reports*) reports the very great success which followed the hypodermic injection of the sulphate of morphia as a remedy for the excessive jactitation, restlessness, and convulsions which so often attend sun-stroke. It was used as auxiliary to the ice treatment. — *Id.*

Goitre — Hypodermic Injection of Iodine.

THE author treats goitre by hypodermic injections of iodine. He began with four or five drops of the tincture, and gradually increased the quantity, repeating the injections every eight days or so. — *Prof. A. Lücke, in Berliner Klin. Wochenschrift.* — *Id.*

Spasmodic Asthma of Children.

BROMIDE OF POTASSIUM, in six grain doses in syrup, every two hours, is worth a trial in this affection. — *Dr. W. Begbie, M. Sondahl.*

Chronic Catarrh.

GIVE five minim doses of tincture of aconite every four hours. Opium has a similar action in such cases. — *Dr. S. Wilks, Id.*

Unguent for Bronchocele.

PROF. JAMES R. WOOD, of New York, extols the following formula as an ointment in bronchocele and other glandular tumors:

R	Ung. stramonii,	-	-	-	-	-	-	-	ij
	Ext. conii,	-	-	-	-	-	-	-	ij
	Iodid. potassii,	-	-	-	-	-	-	-	ij
	Iodini,	-	-	-	-	-	-	-	gr. x

M. — *Detroit Review.*

Removal of the Odor of Carbolic Acid.

A CORRESPONDENT of the *Lancet* says: "The disagreeable odor left by carbolic acid can be readily removed by means of chloride of lime or Condy's fluid." — *Dental Cosmos.*

Muriate of Ammonia as a Remedy.

DR. CHOLMELEY * * * confirms the observation of Dr. Anstie in a paper in the December number of the *Practitioner*, as to the great efficacy of the muriate of ammonia as a remedy for neuralgia and myalgic pain. But Dr. Cholmeley goes on to say that with regard to a matter on which Dr. Anstie spoke more doubtfully—the efficacy, namely, which certain authors have ascribed to this drug as an emmenagogue—he has formed, from a large experience, a decided opinion in favor of the utility of this medicine. He is convinced that in a very large number of cases of absent or suppressed menstruation, muriate of ammonia acts in a very direct and powerful manner in establishing or restoring the flux. Dr. Cholmeley has now experimented with the muriate, in doses of 10 to 20 grains, in so large a number of hospital and dispensary patients, that he can not suppose there is any room for fallacy in this conclusion.

On Muriate of Ammonia as a Remedy for some Nervous Affections.

THE *Edinburgh Medical Journal* thus refers to Dr. Anstie's paper:

"Muriate of ammonia is one of those common-place and unattractive substances which we, in this country, are little apt to credit with extensive remedial properties in disease." We quote the first sentence of an eminently suggestive paper by Dr. Anstie (*The Practitioner*, December, 1868), which treats principally of the employment of this remedy for the relief of (1) various kinds of pain, and (2) of certain cases of suspended secretion dependent on nervous exhaustion. Before very briefly describing some of the applications mentioned, we think it right to state that we are by no means prepared to coincide in Dr. Anstie's therapeutics, in so far as this is founded on physiological data. Under the first class the disease termed *myalgia* is said to be specially amenable to treatment by muriate of ammonia. Doses of from ten to twenty grains are recommended, and by their use this disease may be cured as certainly as ague by quinia. This class also includes various neuralgias proper, such as *migraine* (usually referred to disorders of digestion) and *clavus hystericus*; both of which Dr. Anstie believes to be distinct and primary neuralgias of the fifth cranial nerve. Of all the internal remedies that can be employed in these headaches, none is apparently so beneficial as the muriate of ammonia, its virtue depending on its mildly stimulant properties. It should be given in the same doses as for myalgia. In *intercostal* neuralgia, and especially in that form met with in suckling women or in phthisical patients, this remedy is also of great value, frequently "pain being relieved in half an hour." It may also be used with advantage in the milder varieties of *sciatica*, which occur in young and debilitated persons; and in that somewhat obscure form of neuralgia termed *hepatic*. Among the therapeutic applications to relieve suspended secretion, Dr. Anstie expresses his conviction that muriate of ammonia "is the most powerful of all functional restoratives" of suspended bile secretion. He especially recommends it in those cases where the disease is produced by severe and exhausting mental excitement; and mentions that he has seen several instances in which two or three doses of twenty grains have caused a marked recommencement of biliary secretion. All these, and various other therapeutical indications, are founded on the supposition that this remedy is a "pure tonic stimulant" to sensitive and to vaso-motor nerves.

Lime-Water in the Treatment of Bright's Disease.

KUCHENMEISTER recommends, in the treatment of Bright's disease, and of nephritis, after scarlatina, the use of large doses of lime-water, theoretically from its having the property of dissolving proteine. Lyon Médicale details the treatment, and says that caustic lime in solution, or any of the soluble salts of lime, will answer equally well. He has seen the urine increase from

30 grammes to 120 the first day, 180 the second, 300 the third, and up to 1,020 the seventh day, under this influence; sometimes a slight hæmorrhage necessitates the disuse of this treatment; but the quantity of albumen in the urine sensibly diminishes. — *Medical Press and Circular*.

Amblyopia Cured by Hypodermic Injection of Strychnia.

DR. JOS. TALKO, of Tiflis, reports (*Klin. Monatsblätter f. Augenheilkunde, Mai*) a very interesting case of amblyopia cured entirely and solely by this method. The doses used were $\frac{1}{2}$ raised gradually to $\frac{1}{4}$ of a grain of nitrate of strychnia; the injection was made in the neighborhood of the affected eye; it seemed to answer best when done in the supra-orbital region. The cure may be said to have occupied about seven weeks, and was then complete. It is remarkable that such large doses, repeated as often as once a week, produced neither local inconvenience nor constitutional poisoning, with the exception of the trivial symptoms. — *The Practitioner*.

Calabar Bean in Tetanus and Trismus Neonatorum.

DR. MONTI has been trying this treatment in four cases of tetanus in new-born children, and one case of traumatic origin in a boy four years old. The traumatic case and two of the infants recovered; the remedy was mostly administered by subcutaneous injection. The author remarks on the extreme rarity of favorable results in this disease, and concludes, from his own experience, and that recorded by other observers, that calabar bean offers a much better prospect of positive therapeutic results than does any other drug. The proper dose for subcutaneous injection of an infant a few days old seems to be $\frac{1}{30}$ to $\frac{1}{4}$ grain of the extract; in the boy of four years old, Monti injected as much as $\frac{1}{2}$ grain, and a total of $6\frac{1}{2}$ grains of the extract were given altogether, by stomach and by skin. — *The Practitioner, August, 1869, from Jahrb. f. Kinderheilkunde, Mai*.

Preservation of Dead Bodies.

At the meeting of the Imperial Academy of Medicine (June 8), M. Devergie stated that, at the School of Practical Anatomy, bodies injected with a mixture of three parts of glycerine, and one of carbolic acid, had been preserved for several months without giving off any unpleasant odor.

A New Styptic Collodion.

M. CARLO PARESI gives, in the *Gazette de Turin*, the following recipe: Collodion 100 parts, carbolic acid 10 parts, tannin 5 parts, benzoic acid 3 parts.

Agitate until a perfect solution is formed. It is of a brownish color, gives a pellicle similar to ordinary collodion, and instantly coagulates blood. — *Indian Medical Gazette.*

DR. WILLARD PARKER, of New York, is responsible for the following prescription :

R	Magnesia carb.,	-	-	-	-	-	-	-	i
	Cret. preparat.,	-	-	-	-	-	-	-	ss
	Ferri carb.,	-	-	-	-	-	-	-	ij
	Sodii chlorid.,	-	-	-	-	-	-	-	ss
	Sodæ carb.,	-	-	-	-	-	-	-	iiij

M. S. — Two grains and a half at a dose.

It is proper to add that the patient was directed to resume total habits, which had been temporarily laid aside.

THE *Investigator*, of this city, thinks the damp weather of the early summer attributable to the eclipse, and the increased prevalence of cholera morbus due to the damp weather, and that Arsen. "stopped the whole train of symptoms short off." In one case Verat. was needed to stop the cramps. We are delighted to read also that, "In this disease, this year, our experience and observation have led us to look upon Arsen. as meeting the *genius epidemicus*."

It is asserted that acute *Orchitis* may be subdued, in twelve hours, by applying a strong solution of Nitrate of Silver over the entire surface of the swollen part. Meanwhile, it is suggested as desirable to bring the patient under profound sedative influence. In the olden time orchitis was commonly treated by antimonial emetics carried to the production of uttermost nausea. Either plan seems better than the modern heroic one of puncturing the tumor at once.

Sulphophenic Acid.

MR. JOSEPH HIRSH, in the *Pharmacist*, claims for Sulpho-carbolic acid a disinfecting power over simple Carbolic acid in the proportions of 375 : 225. Aside from its greater efficacy, he says, the point of economy is in favor of Sulpho-carbolic acid, as it can be produced at less cost. This is a point of considerable importance, as the demand keeps Carbolic acid at too high a price for that profuse use needed to secure its satisfactory

action as a general disinfectant. For the latter purpose it is said (Squibb) that the impure acid is superior.

"The Sulpho-carbolic acid was prepared by digestion of its two constituents for thirty-six hours. The mixture gradually grew warm, the rise of temperature continuing for twenty-four hours, when it slowly subsided. The mixture of the pure acids assumed, slowly, a greenish color, which finally grew very dark, so as to be easily mistaken for black, as is the case with the aniline black, which, in reality, is a dark green. The crude Carbolic acid grew warm much sooner with the Sulphuric than the pure, due to the decomposition of the impurities by the Sulphuric acid, its color being jet black. It emitted, continually, pungent fumes of Sulphuro-carbolic acid, which were highly volatile and penetrating. Its disinfecting power was tested with putrid blood, and was found to stand between that of Carbolic and Nitrophenic acid. * * * * *

Experiments, to determine the comparative disinfecting power of Carbolic and Sulpho-carbolic acid, disclosed the fact that Carbolic acid (the impure used by the city, and, according to Squibb, much superior as a disinfectant to the pure acid) was capable of disinfecting eight thousand parts of Chicago River water completely; the water in greater quantity evolving "strong" volumes of the fetid, sulphureted and phosphorated hydrogen. This last odor adhered to the vessel after emptying the partly disinfected water. The Sulpho-carbolic acid, also crude in the dilution of 1-16000, completely disinfected the same water, taken at the same time from the same vessel, while a further dilution to 1-32000 made the odor of the water appear, but very faintly, while at the same time that of the disinfectant was still plainly perceptible. After emptying the mixture, and filling the vessel, in which the disinfection had taken place, twice with pure water, washing it each time, there still remained a strong odor—but not unpleasant—of the disinfectant, which thus seemed to adhere, with extraordinary tenacity, to the vessel. Disinfection is due to the chemical combination of the disinfectant with the noxious substances, which thus become neutralized, amounting to the same as annihilation, since they then lose their characteristic activity just in the same manner in which this takes place with other chemical compounds in case of neutralization. As a process of chemical combination, disinfection is subject to the usual mathematical rules governing all combinations, and laid down in the tables of equivalents.

"According to these, it is not surprising that the mineral acid compounds of Carbolic acid possess a higher saturating, and therefore disinfecting, power than the Carbolic acid itself.

"Sulpho-carbolic acid may be represented by the formula:

$\text{HO} + (\text{C}_{12}\text{H}_5\text{O}, \text{SO}_3)\text{SO}_3$; *i. e.*, it is made up of two atoms of Sulphuric acid, of which fifty parts, by weight, will neutralize, or in our case, disinfect, as much as 125 parts of Carbolic acid, which is also contained in the above." — *Pharmacist*.

IN order to obtain the 315 grammes of nitrogenous matter which man requires daily, it would be necessary, according to Payen, to consume sixteen dozen oysters, if they should form the sole nutriment. — *Journ. de Pharm. et Chem.* *Id.*

DR. A. FRÆHDE established the identity of Hydrocarotine and Cholesterine, of which the former seems to be a hydrate. This partly illustrates the nutritive value of carrots. — *Archiv. der Pharmacie.* *Id.*

EXTRACT of Calabar bean, suspended in gelatine, forms convenient elastic sheets for application to the eye. The dose contained in a small piece should be 0.010 gr. of the bean, or 0.0005 gr. of the extract. — *Arch. der Pharm.* *Id.*

PROF. BUCHNER, in Munich, demonstrated lately again the transformation of Arsenic into Sulphide of that metal in cadavers of those poisoned with the acid. — *Arch. der Pharm.* *Id.*

On the Use of Starchy Food for Infants.

AT a meeting of the Obstetrical Society of London, July 7. (*Medical Times and Gazette*), a paper was read, by Dr. Selby Norton, on TEETHING.

In this paper the author advocated the opinion that the maladies usually attributed to teething are due to the wide-spread and unphysiological practice of feeding infants on starch foods. He showed that starch was non-digestible by the infant stomach, partly because no minute division of the starch granules could be effected in the infant's mouth, and partly because, from the mode of feeding, the greater part, at all events, of the starch is passed at once into the infant's stomach without being rendered soluble by the ptyalin of the saliva. The diseases usually ascribed to teething — diarrhœa, convulsions and bronchitis — in the author's experience, never occurred in a naturally fed child; and, on the other hand, they occurred sometimes in the first month, where the teeth obviously could exercise no baneful influence, and they occurred, too, when the gums were quite cool and natural. After considering these diseases at some length, and showing how often they could be directly traced to the irritation of bowel produced by starch food, he concluded by condemning altogether farinaceous food for infants, and advocating the sole use of cow's milk diluted with water.

Dr. T. Ballard said he was pleased to see some one come forward to support the "heretical" doctrine that teething was not a cause of infants' disease—a doctrine he had advocated many years ago. While so far, however, agreeing with the paper just read, he could not coincide in his view that starch was such a patent cause of disorder. He did not think starch, *per se*, was harmful, though of course it was not a substance on which an infant could be reared. With respect to the general subject of infant mortality, he thought that practical good would result from the inquiry if the Society could agree upon some formula of dietary for general recommendation of a simple and intelligible character. He would also lay much stress not only upon the importance of sufficient food, but on the importance of not allowing the bowels to act more than twice in the twenty-four hours. This could be effected by attention to the mode of giving the food; by not allowing an infant to suck without obtaining the food it craves, or to suck too hard to obtain it. In either case the bowels became disturbed and diarrhœa was the result. Should this occur while the child is at the breast, the too frequent motions indicate the necessity of some supplementary feeding; or, if the infant be fed entirely from the bottle, there is probably some defect in its construction or action. Where maternal milk, in sufficient quantity, could be obtained, of course no other food was requisite. Next to this came the milk of some other animal, and, where circumstances required it, to this might be added some preparation of wheaten flour.

Dr. Phillips considered it injudicious to give any farinaceous food to an infant under six months old. The practice was as physiologically incorrect as it was practically found to be hurtful. The paper read had not convinced him that no evils were ever caused by teething; but he quite believed that the evil effects ascribed to teething were often caused or increased by improper feeding. At the Children's Hospital, instructions "How to bring up Babies," had been distributed with the best effect.

Dr. Brunton said that he also objected *in toto* to giving a child farinaceous food up to six or eight months. Up to that age, where suckling could not be carried out, he gave cow's milk and water, sweetened, increasing the proportion of milk as the child grew older.

Dr. Routh said that on no point was there more evidence than against the use of starch for infants before they had teeth. For—
1. The assimilation of starch depended on its conversion into sugar by the saliva, but infants secreted no saliva for the first two or three months; 2. In infants dying after the use of starchy food, examination showed that it passed through the alimentary canal unchanged; 3. The alimentary canal of a baby was that of a carnivorous animal; 4. The food supplied to purely herbiv-

orous animals recently born was animal. *Ergo*, starchy food should not be given to infants until, at all events, the appearance of teeth. He could not agree with the recommendation of cow's milk diluted with water, as a good food for infants. The milk, before it was purchased, was generally watered, deficient in cream, acid, and wanting in sugar of milk. If used at all, it must be mixed with lime-water, and sugar of milk added in proportion of half to one ounce of lime-water, and a spoonful of sugar of milk to every half-pint of milk, with one-third water. It should be begun early, even from birth, in all cases where it was clear beforehand that the mother could not nurse long. The idea that it was wrong to mix two milks was fallacious, and his experience had proved to him that the earlier it was begun the more readily the child's stomach bore it, and in nine cases out of ten a child so prepared could be weaned readily and with safety. To one other point only would he refer — the congregation of infants in nurseries. This was a most dangerous practice. The atmosphere generated under these conditions was most baneful, probably from the quantity of ammonia generated from the urine, as well as sulphuretted hydrogen and other noxious gases from the stools. Children required air, and pure air especially. Their respiration was more rapid than adults. Such congregation of infants was always, therefore, a great cause of infant mortality. Malignant thrush, *muguet*, and contagious diseases spread like fire in such atmosphere. — *Phila. Reporter*.

Antiseptic Treatment of Wounds.

LETTER FROM DR. J. C. WARREN. — *Mr. Editor:* Having recently had the privilege of visiting the wards of Prof. Lister, at Glasgow, it may prove of some interest to the readers of the *Medical Journal* to learn the latest modifications he has made in the antiseptic treatment of wounds.

This subject still continues to excite considerable interest in most English cities, and has been taken up and employed successfully in some of the continental schools. Although this system has been condemned by many distinguished surgeons, it has not been by any means universally so, and still claims several enthusiastic supporters in Great Britain.

It may be as well to touch upon his germ theory of putrefaction and the process of healing by scabbing, although the subject has been very clearly and elaborately exposed by him in a series of articles which have appeared during the last eighteen months in the *Lancet* and *British Medical Journal*. The germ theory may be briefly stated thus: — suppuration in wounds is caused by an irritation produced by the presence of germs or organisms which find their way into a wound, and there multiply and cause putrefaction.

Putrefaction, then, is the exciting cause of suppuration in a wound: can this be prevented, the largest wound may heal without any secretion of pus. This process of healing, such as may take place in a large lacerated wound of the leg accompanying compound fracture, is not considered by him to be healing by "first intention," nor indeed "by granulation." It is rather an intermediate process. Given a wound sufficiently large and accompanied with sufficient loss of substance to be incapable of healing by first intention—the extravasated blood and serum cover the surface of the exposed parts and form a clot which serves the purpose of a protecting scab. Provided now that no living germ is introduced beneath or penetrates this covering, the cell formation takes place quietly in the parts below, while the clot itself becomes organized in the same manner as a thrombus in an artery. The clot or scab establishes in this way a vascular connection with the parts beneath. Meanwhile, cicatrization continues, and as the edges of the wound approximate each other the scab is compressed on all sides, and finally atrophies and comes away. If it is cut into, however, before union is complete, it will *bleed*. When a wound heals in this manner, no pus whatever is found upon the dressings. They may be stained by the escape of a small amount of serum and what is called a mucous discharge. This fluid, examined carefully under the microscope, is found to contain no pus corpuscles whatever.

The antiseptic treatment of wounds has undergone a variety of modifications since Mr. Lister first began his experiments, some two years ago. Most of these have been described at length in the English journals, and will hardly need repetition here, especially as his present method differs from them in several essential particulars.

The dressings are now changed daily, and the tin plate and the paste have been discarded, and a very thin piece of oil silk and a lac plaster* are used in their place. After an operation the wound is washed with a solution of Carbolic acid, one part to twenty of water, and the edges are brought together by antiseptic sutures. The nozzle of a syringe is then introduced into one end of the wound, which is freely syringed out with the same solution. A strip of very thin oil silk, rendered antiseptic by being dipped into the acid solution, is then placed upon the wound of a size just sufficient to cover it. The object of this is to protect the wound from the Carbolic acid contained in the dressing next

* The receipt, as given us by the New Apothecaries' Company, at Glasgow, is the following:

Take of Shellac 3 parts,
Carbolic acid 1 part.

Dissolve with gentle heat, and spread with machine; when spread, coat with a solution of gutta percha, 1 + 16 of bisulphate carbon.

to come. This consists of the lac plaster. Before application the plaster is stripped off from its cambric, by moistening the cloth in water. This is done in order that the plaster may more easily adapt itself to the parts about the wound. The gutta-percha layer must also be rubbed off. The size of the plaster thus applied is sufficient to overlap the wound an inch or two in all directions. Above this is applied another much larger piece of the plaster, with its cambric on, and the whole is secured by a bandage.

The object which he tries to accomplish is to *blockade* the wound in all directions by dressings exhaling Carbolic acid vapor, while the wound itself is not touched by the acid at all. The small amount of the acid left in the wound soon ceases to exert any irritating influence, and the wound is exposed only to the vapor of the acid which penetrates the oil-silk covering. Mr. Lister has found by experiment that the vapor of the acid which passes through a piece of oil-silk is sufficient to disinfect any animal matter which may be on the other side. Any secretions which exude from the wound and become exposed to the air are thus thoroughly disinfected before they have a chance to regurgitate. The same fate awaits any germ which tries to find its way in with them.

If there is any discharge from the wound the dressings should be changed daily. The upper dressing being removed, the lower layer of plaster, which adheres closely to the skin, is carefully peeled off from one end and with it the oil-silk. As the wound is exposed it is syringed with the $\frac{1}{40}$ solution, and this is continued until the new dressing is applied.

Plaster dressings can not be applied in all cases; for instance, on wounds about the genital organs. In such cases a piece of lint soaked in a solution of one part to five of oil is used, but this must be changed frequently.

We should not omit to add that the parts to be operated upon should be well washed with a weak solution of the acid, and if there are any folds of skin or parts covered with hair in the neighborhood, these should be rubbed hard with the $\frac{1}{2}$ oily solution, to destroy any organisms that may be lurking about.

A word here about the antiseptic ligature and suture. A detailed account of the ligature of arteries on the antiseptic system has been given by Mr. Lister in an article in the *Lancet* of April 3, 1869, and he still continues to employ ligatures prepared in this way. This, in brief, consists in the employment of fine catgut ligatures steeped in an oily solution of the acid of the strength of one part to five, with a small quantity of water diffused through it. It has been found, by experiment, that such a ligature not only does not exert any irritating influence on the parts about, but eventually becomes organized and intimately

connected with the outer coat of the artery and the surrounding tissue. At present, torsion is used almost universally in England for all the smaller arteries, and the writer had the opportunity of witnessing an amputation of the breast by Mr. Lister, where not a single ligature was used.

Up to the present time he has contented himself with employing silk for sutures—with one exception, however. This was in an operation for the removal of a small tumor on the forehead, where catgut sutures were used. The wound was dressed antiseptically, and the patient left for the country and was not seen for several days. On his return, the dressings were removed, and the wound was found to have healed without suppuration. The sutures remained, to all appearance, unchanged; but on seizing one of them with the forceps in order to cut them with the scissors, the external portion came away easily, leaving *no trace behind* of the part which had been buried in the edges of the wound. The same was the case with all the other sutures. He is of the opinion that in this case the deep portion of the suture had either become organized or was absorbed. He purposes to experiment further in this direction to see if this result is constant.

The antiseptic dressing has been found to be most successful in the treatment of abscesses, compound fractures, excisions of the breast, and in those wounds to which the dressing can be easily and accurately applied. He has not had uniform success in the treatment of amputations, though he has found them, on the whole, to do much better than when dressed according to old rules. During the last two years that he has employed this system, he has had but one case of erysipelas and two of pyæmia. This, in wards which contain on an average some sixty patients, and in an infirmary which has for its site an old cholera burying-ground, is certainly something to boast of.

The writer has had the opportunity of conversing at length with Mr. Lister on this system, and also with many prominent English surgeons, and can truly say that no where has he seen the details so carefully attended to as in Mr. Lister's wards. Most surgeons, in England, at least, have contented themselves with following his directions in a general way, frequently omitting some important particular. For instance, one writer states that he took great pains to wash out his sponges in water both before and during the operation! The very thing he should have taken care not to do, unless the water had been previously rendered antiseptic.

Whatever the merits of the antiseptic system may be, it is very evident that a proper appreciation of them can never be arrived at without that scrupulous attention to detail which has so frequently been insisted upon by its originator.

Very truly yours, J. C. WARREN, M.D.

Colotomy for Relief of Cancer of the Rectum with Stricture.

ON the 24th of last February, I was called to see Mrs. M., a Scotch lady, aged sixty-four years; mother of eleven children. She had been treated by several surgeons for "inward piles." An examination per rectum revealed a stricture one inch from the anal orifice. She said, "before this bowel trouble, she had never required medical aid; never had any of the troubles of women in child-birth; had the constitution of a *Heeland poney*; took forty-five pills now to open her bowels, of which one several years preceding was sufficient; for several days and nights was constantly on the stool; the discharges were as pipe-stems, mixed with blood and very offensive; with intolerable scalding, burning pain; was frequently two or three weeks without a discharge from bowels; did not think she could survive another day, from the pain and distension; had suffered more or less sixteen years," etc.

In the presence of the Drs. Boerstler, I dilated the stricture (with an instrument similar to the dilator used in glove fingers), and during the next twenty-four hours she passed five chamber-pots full of feces; passed corn eaten in August; and fell thirty-six inches in circumference. This afforded relief, but the hæmorrhage was nearly five pints, and precluded a repetition of future dilatation.

This operation, however, afforded an opportunity for diagnosis, and that was cancer of the rectum, the stricture a part of that disease—prognosis death. The treatment, concentrated food, and to relieve pain Svapnia (Dr. Biglow's purified opium).

From February to July her condition, from proper diet and anodynes, was tolerably comfortable, with only occasional paroxysms of pain and great tenderness. So painful was the simple touching of the stricture, as that she positively refused any future examinations, alleging a continuance of the pain following the touch of the fingers for days. In July, with the excessive heat, pain, tenderness and anorexia, we hoped the case would terminate, and as she always said, "she was not afeard til' dee;" we gave the Svapnia in doses as high as fifty grains in twenty-four hours, and even these doses failed of relief. I then proposed *Colotomy as a palliative measure*; and as the thermometer then was in the nineties, we awaited a change in the temperature, until the morning of the day of the eclipse, 7th of August last, hoping, as had frequently before resulted, that we should have cooler weather. In the presence of Drs. Boerstler, Wagonbuds, Kinsman, Carpenter and others, the patient being fully anæsthetized, I performed Amussat's operation. I think it unnecessary to detail the various steps of my operation, but refer the reader to Erichsen's Surgery, or for greater satisfaction to Prof. Blackman's detail of two cases, in *Cincinnati Journal of Medicine*, Febru-

ary and March, 1866. I followed Amussat as closely as possible, and found just the place "where the difficulties of the operation commence," and where Prof. Blackman truly says, "here you will meet trouble." I met it by the protrusion of more than a pound of fat; I removed it; then in the triangular space, in front of the quadratus lumborum found the colon; brought it to the surface by two ligatures passed through it, used them with other two in fixing it to the skin, having previously made a slit of one inch and a half in the bowel, and dressed the wound as directed. I made an incision of nine inches through the integuments, thus giving ample room; and by the use of Carbolic acid, not one drop of matter ever formed, and I did not remove the sutures until the tenth day. (Commend me to Carbolic acid as a dressing.) On the seventh day, fæces were discharged from this artificial anus, and two passages a day with immense flatulence (however gradually lessening), have continued and now exist.

I will state one fact, that probably aided me and is not recorded. I used a hair pillow under the abdomen, the patient lying on her face. This protruded the flank and threw the colon outward. Could I have done so, I would have injected into the colon a quart or so of gruel, but the stricture precluded it. The hair pillow was the only substitute and answered a good purpose. I found a large impaction of magnesia in the colon, and on tracing the rectum down encountered the cancerous nodules.

This is now the sixth week of the operation, and in my long professional life, no operation or duty performed, gives me more pleasure. There is perfect rest, return of appetite, with Svapnia gradually reduced from fifty grains a day to four, and only some trouble to keep open the orifice as it is closing with cancer cells. For this purpose I use a silver dilator and compressed sponge, and should my patient not live one month more, I am assured it will be the most comfortable one for years.

I prefer the space that might be occupied by details of the operation, to be used in presenting arguments in favor of or against the operation of Colotomy. It is a formidable one, and has friends and decided opponents. It may in some unfortunate case decide the surgeon to perform Colotomy, and would be more profitable to him than my detail of one case, which detail he will find as referred, better than I can describe it, but the arguments may not be so convenient. I am indebted to the research of Prof. Blackman for my extracts, and will use them liberally.

Prof. Gross, third edition, Comprehensive System of Surgery, 1864, vol. 2., p. 619, says: "It ought to be discarded as among the obsolete devices of surgery." "I have performed the operation but twice, and I do not think any thing could even induce me to attempt it again," and offers an apology for even describing

it. In another place he calls it "a criminal procedure." Mr. Pirrie, of Aberdeen, in his last edition of Surgery, quotes Prof. Gross, with approbation.

Prof. Henry H. Smith, in his great work on Principles and Practice of Surgery, vol. 2, p. 441, says: "At first sight it would appear that this operation must evidently expose the patient to loss of life, and can but prolong it only at the expense of a most loathsome disease. That the bowel may be thus opened, is certainly an evidence of the efforts of the surgeon towards relieving the defect of nature; but the results are by no means positive that the operation can assure to the patient, even a continuance of a miserable existence."

I might refer to many other leading authorities, who, if they do not denounce the operation as "criminal," offer no arguments in its favor, but prefer a quotation from Mr. Teele, of Leeds, who, in his valuable article published in Costillos' Cyclopædia of Practical Surgery, vol. 2, p. 219, lays down the following doctrine: "It has been maintained that the surgeon is not justifiable in prolonging the life of an infant, in whom the anus and rectum are imperforate, upon the loathsome condition of an artificial anus; but such an opinion cannot be justified upon any principle of morality, since an imperative obligation rests upon the surgeon to employ to the utmost of his ability, the means placed at his command for the relief of human suffering and the prolongation of life. In obstructions from carcinoma, the operation has been objected to, on the ground that the disease itself must in a short time prove fatal; but if the obligation of the surgeon to prolong life in infancy be imperative, surely he will feel it no less binding in reference to adult age, when he considers how vast and important may be the concerns which hang upon the prolongation of life in an adult human being for a few months, or even for a few days or hours."

Now let us try Prof. Gross' sweeping denunciations of this operation by his instructions for the performance of amputations in *malignant diseases*. See his remarks under the head of Operative Surgery and the Qualifications of a Surgeon, p. 473, vol. 1, op. cit: "It is a sad and humiliating spectacle to see a surgeon cut off a limb, or remove a cancerous tumor, merely for the sake of having it said that he performed an operation. I am daily shocked by the reports of cases of the extirpation of malignant growths in the hospital, as well as in the private practice of this and other countries. The question may well be asked, when will such silly and unmeaning, or to use the proper expression, criminal proceedings cease to disgrace our profession, and to shock our sensibilities?" Now, should I prove Prof. Gross himself guilty of such "criminal proceedings," my reader may be shocked. We quote from page 496, vol. 1, where he speaks of

amputations in general. "To cut off an arm at the shoulder, on account of an incipient cancerous affection of the head of the humerus, when the elbow, forearm, hand and fingers are all perfectly natural and glowing with health, unconscious, so to speak, of the fate that awaits them, is enough to sicken the stoutest heart, and to discourage the boldest operator. If there is a more disagreeable task than this, I am ignorant of it, *and yet I would not shrink from its performance* (the italics are our own) *even when there is but a faint prospect of prolonging life, if only for a few months.*"

He also, at page 501, repeats the same doctrine, and at page 477 recommends the amputation of a deformed foot, as he "can see no difference between the physical suffering that is induced by a diseased bone, and the mental distress that results from a distorted foot." In varicocele he recommends the operation, because "its mental effects destroy the happiness of the patient," and this operation, in his own skillful hands, has proved fatal. Again, at page 924, vol. 2, he advises operative interference in cases of malignant disease of the breast, when, "as not unfrequently happens, the patient's mind, filled with gloomy forebodings, is in a state of constant depression and despondency. Here the knife acts as a cordial; hope is revived; new life springs up, and for a while, at least, there is relief from suffering." In many other cases he would operate as "a palliative," even to remove the effluvia which poisons the air the patient breathes. We could quote further, but our position is conceded. If any further proof were needed, we would refer to Velpeau's testimony to Prof. Bennett, of Edinburgh, in speaking of operations for relief of *malignant diseases*, when he says that "to my former list I could now add nine hundred and ninety-one cases."

Mr. Erichsen says, in his London edition of his *Science and Art of Surgery*, page 1,029, that he witnessed Amussat's first operation in Paris in 1839, and since that period it has been performed nearly fifty times (forty-seven — mine the forty-eighth case) — and that when the operation has been followed by fatal results, peritonitis does not seem to have exercised any material influence, but death from previous disease, on the constitution or changes from previous disease in the bowel, rather than to the operation itself, "which appears occasionally to have been uselessly done at the last extremity." He says "we should, therefore, have less hesitation in performing the extra-peritoneal (Amussat's operation) in an early stage of those cases in which it is called for, than we should if the section itself were attended with any serious risks to the patient's life."

Mr. Henry Smith, in his *Articles on Diseases of the Rectum*, would not advise the operation "in the last stage of the disease," even though sudden and complete obstruction should occur, but

it should take place in the early stages of the disease; and further says, the surgeon is only doing his duty if he recommends a procedure, which, although in itself surrounded with difficulty and danger, *may* yet prolong life for several months, at least, and allow the patient to die, at last, in comparative ease." This is the whole case, and is all the advocates of Colotomy expect.

I could detail the cases of Curling in his invaluable work on the *Treatment of Painful Cancer of the Rectum without Obstruction*, and quote, in conclusion, his words: "The operation is not intended to cure the disease, but for a purpose second in importance only to cure, namely, to relieve immediate suffering, and to prolong life." If the brightest pathologist of his day, Broussais, had lived to the period of the discovery of anæsthetic agents, he might have been made comfortable and his useful life prolonged by Colotomy. He was right in his diagnosis of his own case—"tout est dans le rectum"—as, after his death, four inches of the rectum, in its entire circumference, was found diseased, and the abdominal viscera, pectoral organs and brain were perfectly sound.

I close by a quotation from Curling: "The operation of Colotomy may be required not only on account of the difficulty experienced (in cancer) in obtaining relief from the bowels, but also *in consequence of the extreme misery produced by the disease*, and the surgeon is not justified in withholding from his patient even temporary relief from the great miseries I have described, which may be offered by this operation." I could add similar statements from Dr. Walter Hugh Walshe, of University College Hospital, London; Dr. Wm. Brinton, in his Croonian Lectures on Intestinal Obstructions; Mr. Samuel Solly's Surgical Experiences, London, 1865; Dr. Williams, of Dublin; Callisen, (who operated perpendicularly); Dr. N. Ward (who introduces a tube and fills the colon with fluid); and Gunther's *Lehre von dem operationem am Bauche*, with its truthful drawings illustrating the operation, *et multos alios*, but my only purpose is to show a firmness in the profession in this, as in many (not many equal it) diseases to give the patient the benefit of an operation, blessed in its ultimate results, however horrible to the eye of some in the act of its performance, or its subsequent annoyances from an artificial anus.

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Chloral.

DR. LIEBREICH's recent paper, at the Paris Academy of Sciences, on the action of Chloral, says it is a trichloride of aldehyde, and is soluble in water, and as in this solution it exercises no irritant effect, it is very suitable for absorption into the econ-

omy. It takes its place between Ether and Chloroform as an anæsthetic.

Experiments made on rabbits have given the most satisfactory results. Profound and calm sleep has been maintained for eight or ten hours, and Dr. Liebreich adds that the rabbits on awakening have manifested none of the usual results, and have proceeded to eat with avidity. — *Dublin Med. Press and Circular*.

Bromide of Potassium for the Sleeplessness of Infants.

M. MOUTARD-MARTIN has communicated to the French Academy of Medicine a memoir on "Some Applications of the Bromide of Potassium to the Medicine of Young Infants." Every one, he observes, admits the possession of sedative properties by the bromide, and in this direction it has become one of the most useful substances in the *Materia Medica*. Bearing in mind its hyposthenic action in erethism of the nervous system, and its innocuity, even in large doses, he believed that it might be employed with advantage in some of the pathological conditions of very young children. Among these, sleeplessness, alike mischievous to the infant and wearying to the nurse, is one of very common occurrence. The child does not seem otherwise ill, but has a very great insufficiency of sleep both by day and night, or only at night. Where a great variety of means has failed to remove this sleeplessness, the bromide succeeds in a remarkable manner, and M. Moutard-Martin adduces in his paper several cases in proof. His conclusions are: 1. The bromide of potassium given in small doses (from five to twenty centigrammes) is very well tolerated by young infants. 2. By its sedative action it cures *insomnia* in these cases. 3. Administered to infants suffering from the accidents of detention, such as restlessness, *insomnia*, cough, etc., it frequently relieves these; and it is probable that its employment, regulated with prudence, would sometimes prevent the occurrence of convulsions. 4. It should not be administered to infants when suffering from diarrhæa. 5. In certain exceptional cases, in which nervous erethism is predominant, its action is prompt and decisive. — *Medical Times and Gazette*, Dec. 12, 1868.

Use of Oil of Turpentine in Parasitic Diseases of the Head and in Traumatic Erysipelas.

For the destruction of the parasites which cause many scalp diseases, Küchenmeister has recommended alcohol, which retards the development of spores and fungi; but several experiments have proved that the operation of alcohol does not extend to the fungi vegetating in the hair-follicles. Tincture of iodine acts more certainly than alcohol on the fungous growths developed

in the hair follicles, as in herpes tonsurans, but it is necessary to shave the whole head, and to apply the tincture repeatedly, until the epidermis has been removed three or four times, and even then there are often disappointments in the cure, which in the most favorable cases requires 102 days. According to Professor Von Erlach, painting with oil of turpentine is much more certain and more rapid in its operations in these scalp affections, herpes tonsurans being cured within fifty days, and several cases of mentagra being cured in the same manner within a week. Since according to recent researches traumatic erysipelas is to be reckoned among the infectious diseases, and often resists the ordinary methods of treatment, Professor Lücke endeavors to destroy the infectious matter by a drug which penetrates deeply into the tissues, and for this purpose he paints the affected parts with oil of turpentine. He records a case in which this plan was successfully tried, and he states that it was also successful in eight other cases, the erysipelas disappearing in two or three days, whereas, formerly he had observed the most dangerous symptoms to occur in similar attacks. A very striking circumstance was the rapid fall of the temperature, in connection with the disappearance of the symptoms, and this reduction of the temperature was always manifested on the first application, and was the more certain in proportion to the energetic use of the remedy, and, therefore, it was especially observable after rubbing.—Prof. VON ERLACH AND LUCKE, Berne.—*American Journal of the Medical Sciences.*

M. Latour on Animal Vaccination and Vaccinal Syphilis.

M. LATOUR, in the *Union Médicale*, after adverting to the isolated position in which this long debate has left M. Depaul, lays down the following propositions as the legitimate results that flow from it: 1. The degeneration of the Jennerian virus is far from being proved. 2. There does not exist a single authentic example of vaccinal syphilis, properly so called. 3. The excessively rare cases of syphilis inoculated by vaccination are explicable by conditions which completely exonerate the vaccine virus from all injurious mixture. 4. A large number of pretended examples of syphilis following vaccination justify the most serious doubts as to the accuracy of the diagnosis. 5. Animal vaccination, simply as another source of lymph, is deserving of encouragement, although it possesses no real or sensible advantage over vaccination from arm to arm.—*London Medical Times and Gazette.*